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Original Articles

ASCITES AND PELVIC DISEASE.*

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The presence of ascites in connection with disease or neoplasms which we have every reason to believe have their origin in the pelvis, always lends an added interest to any case. The methods of bimanual pelvic examination have been so perfected as to leave very little to be desired in the diagnosis of the ordinary lesions of the uterus and its appendages. I do not mean by this statement to belittle the difficulties of gynecologic diagnosis or to give the impression that such a diagnosis can be made by means of a hasty bimanual examination. Gynecology has probably suffered more than any other specialty from superficial methods of diagnosis and treatment based on the resulting errors. One of the fundamental and consequently one of the most important gynecologic truths is that rarely does inflammatory disease confine itself to a single portion of the genital tract. Yet hardly a week passes that I do not have cases referred to me for certain operations which, if they had been performed, would have left the patient much worse off than before, since the examiner had failed to notice other lesions of the genital tract. But, by carefully studying each case, both through the history and by careful pelvic examination, either without or with anæsthesia, an approximately accurate diagnosis can be made in the majority of cases. The difficulties of diagnosis are enhanced twofold, however, when ascites is present as a complication. The fluid within the abdominal cavity is very likely to interfere with accurate bimanual mapping out of the uterus and its appendages. It is not uncommon, for example, for a malignant tumor of the ovary to lie high up in the pelvis and be out of reach of the examining finger below. Its abdominal outlines, on the other hand, may be obscured by the accumulation of fluid between it and the parietes.

The difficulties thus placed in the way of the examiner should not serve as discouragements, but should ever spur him on towards the goal of correct diagnosis. By careful study of the history of each case, in combination with the physical signs, it is usually possible to arrive at a

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fairly accurate diagnosis without the aid of an exploratory laparotomy. In fact, this latter procedure should be the final and not the first step in the establishment of a diagnosis. The operator making a practice of saying he does not know what is the nature of the growth but will ascertain when he opens the abdomen in the no distant future will find his occupation gone. Surgery means more than whirlwind operating without accurate diagnosis. If it stands for anything, it is for careful, conscientious study of each individual case with the idea of arriving at a correct diagnosis. After every diagnostic expedient has been exhausted, then and only then should the knife be employed.

The physical signs of free fluid in the abdominal cavity are known to you all, but for completeness it may be well to review them in order:

1. *Inspection.* With the abdomen and chest of the patient fully exposed and the latter in the recumbent posture, an abdomen, the seat of free fluid, is seen to be symmetrically distended in the flanks. Unless the accumulation reaches large proportions, the abdomen is broader than it is high. Thus it differs in shape from the dome-shaped abdomen so characteristic of confined fluid as met with in an ovarian cyst. The degree of bulging will depend largely upon the conditions of the abdominal walls. In multiparæ, with flaccid walls, the bulging may be extreme. On the other hand, a large collection of ascitic fluid in a young nullipara may show but little distention in the flanks and the swelling may more nearly resemble that of an ovarian cyst. The umbilicus in ascites may or may not protrude, depending upon the conditions of the wall and the amount of fluid. The superficial abdominal veins may or may not be distended, depending upon the amount of interference with the return circulation. This phenomenon is not so common in ascites of pelvic origin as it is where the collection is due to some derangement of the liver.

2. *Palpation:* The feel of the abdominal enlargement in ascites will depend upon the condition of the abdominal wall, and the amount of fluid present. With a small amount of fluid and flaccid wall, there will be considerable compressibility. Such an abdomen will feel not unlike that of a very fleshy person. In a nullipara, on the other hand, there will be a tenseness of the abdominal wall which may resemble the feel of an ovarian cyst. The percussion wave elicited by tapping one side of the abdomen and feeling the impulse on the other is distinct in all free ascitic serous accumulations.

3. *Percussion.* Since the fluid will seek the lowest point in the abdominal cavity and the intestines will float on top of the fluid, the percussion note will be flat in the flanks and tympanitic above. With the patient on the back, the flatness will extend above the pubes in the median line to a varying distance according to the amount of fluid present. A change of position of the patient will cause a re-arrangement of the flat and tympanitic percussion notes, owing to the change in the level of the fluid.

4. *Vaginal examination.* Fluctuation may or may not be made out by palpation through the cul-de-sacs. If the fluid can reach the pelvic side of the vaginal wall, fluctuation will be elicited. The reverse will be the case where exudates or new growths are interposed between the fluid and the vaginal walls.

It is comparatively easy to differentiate between a non-encysted ascitic collection

and an ovarian cyst. In the latter, in contradistinctions to the signs just considered, there will be a dome-shaped abdomen. The latter is symmetrical only in the later stages of the disease, after the cyst has risen above the umbilicus. By palpation the cyst wall often can be differentiated. Owing to the semi-solid contents of certain cysts, or in very tense cysts, the percussion wave may be absent. Percussion shows tympany in the flanks and flatness in the median line; except in intraligamentous ovarian cysts, vaginal examination usually fails to detect fluctuation because the upper border of the cyst is carried beyond the reach of the examining finger. The wall of an ovarian cyst may be so thick as to mask the signs of fluctuation.

Where the ascitic fluid is encysted, as not infrequently happens in cases of tubercular peritonitis of pelvic origin, the differential diagnosis between such a collection and an ovarian cyst may be difficult, as shown by the following case:

Mrs. A. H., age 29, married; referred by Dr. J. B. Bradley, of Eaton Rapids, entered my private hospital June 28, 1902, and was operated upon the following day. The patient's family history was negative. She has always been healthy up to her present illness, which is of some months' duration. For the past few months she has noticed a gradual increase in the size of the abdomen. This has been especially noticeable on the left side. She has had but very little pain, but has lost some flesh. An examination showed an abdominal swelling extending from the pubes to just above the umbilicus. The abdomen was asymetrical, being larger on the left than on the right side. Percussion showed dullness in the left and tympany in the right flank. There was no distinct percussion wave, and when the patient was placed on the right side the dullness in the left lower abdominal quadrant did not disappear. In the median line, the dullness reached above the umbilicus. What appeared to be a distinct cyst wall could be made out just above the umbilicus. A vaginal examination showed the uterus and appendages fixed in the pelvis, and tender. This should have led to a strong suspicion of tubercular peritonitis, but the absence of positive signs of free fluid, and especially the apparently distinct cyst wall led me to think that I had to deal with an ovarian cyst. Operation the following day showed tubercular peritonitis, probably of pelvic origin; the intestines were matted together and there was encysted fluid in the left side, but quite a large amount free in the abdominal cavity. The cecum was considerably distended. The supposed cyst wall turned out to be rolled up and matted omentum running transversely across the abdomen just above the umbilicus. The breaking up of the adhesions and the evacuation of the encysted fluid resulted in a cure.

Signs of free or encysted fluid in the abdominal cavity, accompanied by enlarged or adherent and tender appendages are strongly suggestive of tubercular peritonitis. The possibility of matting together of the intestines and omentum, and the consequent simulation of intraabdominal solid growths should ever be borne in mind. I have seen an apparently solid malignant tumor in the lower portion of the abdomen associated with free ascitic fluid turn out to be a tubercular peritonitis with an agglutination of intestines and omentum. At times, the history is likewise misleading. In both affections there may be loss of flesh and strength.

There may be only a slight rise of temperature in tubercular peritonitis, and no symptoms pointing towards the pelvis. Even in the presence of large accumulations of ascitic fluid, patients with malignant disease of some of the pelvic organs and an abdomen studded with tubercular growths may be quite free from pain. Later in the disease, pain is more characteristic of malignant affections. A persistent, even though slight rise of temperature, is more indicative of tubercular disease. The tuberculin test is often of advantage for differential diagnosis. In the later stage of malignant disease of the appendages with secondary deposits in the peritoneum and other portions of the body, there may be an elevation of temperature associated with considerable abdominal tenderness.

There are two forms of malignant tumors of the ovary, the adeno-carcinomata and sarcomata, which may be accompanied by ascites. The adeno-papillomata, or papilliferous ovarian cysts, while not histologically malignant, will fall into this category from a clinical standpoint. This is because of their tendency to rupture and the consequent implantation of the papillary masses in other portions of the abdominal cavity. Quite a proportion of ordinary multilocular ovarian cysts will be found histologically to be papilliferous. Hence the necessity of a microscopic examination of every ovarian cyst, for the apparently benign tumor may return after removal, if it is histologically a papilloma.

Clinically, all these malignant types of ovarian growths may be considered together, the distinctions being largely histological. The accompanying ascitic accumulation may be small or may reach enormous proportions. The fluid is usually bloody and of a high specific gravity. The peritoneum is thickened and injected and apt to be the seat of numerous metastases. The physical signs of cystic or solid tumors of the ovary, accompanied by loss of flesh and prostration, associated with ascites, would lead one to suspect malignant disease. Ascitic fluid is an unusual accompaniment of a benign ovarian cyst.

The following is an illustrative case of malignant disease of the ovary, accompanied by ascites: Miss B., Gyn. No. 924, single, age 57, entered the University Hospital, June 13, 1904, having been referred by Dr. B. A. Tracey, of Manchester. The patient has been a healthy woman until within a few months, when she noticed an enlargement in the right lower abdomen, accompanied by some pain and tenderness on pressure. Recently there has been a decided increase in the abdominal enlargement. There has been a marked loss of flesh and strength. Examination showed a symmetrically distended abdomen with a protrusion of the flanks. On deep palpation, a mass could be made out in the lower right abdominal quadrant. It was slightly movable and nodular. The presence of ascitic fluid was shown by percussion sounds and their change on change of position. Vaginal examination failed to connect the growth with the uterus or appendages. Operation showed the growth to be a partially solid tumor of the right ovary. There were about 6 litres of ascitic fluid. The glands along the aorta in the region of the stomach were enlarged. There were also metastases in the liver.

The prognosis in this case is, of course, unfavorable. Not until a few months ago were her symptoms so severe as to lead her to seek medical advice. It probably was a slow growing malignant tumor

with sudden development of acute symptoms.

In contradistinction to this kind of tumor, where under the best of circumstances the prognosis is unfavorable, ascites is at times associated with benign solid tumors of the ovary, such as fibromata. I have had two such cases in the last three years. I have also had a third case, but this was unassociated with ascites. I have shown in a recent monograph on ovarian fibromata that out of 82 cases collected from the literature, together with my own two cases, at least forty per cent. were accompanied by ascites. In 8 cases the ascitic fluid reached such proportions as to necessitate tapping. One of my cases was tapped 65 times, under the impression that the fluid was a dropsy, due to organic liver trouble.

It is not difficult to make a diagnosis in these cases. While ascites may be present and bimanual examination may show a solid tumor of the ovary, there are no accompanying symptoms. Such a growth is slow growing and, while it may produce ascites, there is no accompanying loss of flesh or strength. The prognosis here is entirely different from where the ascites is due to a malignant growth. The removal of the tumor and the evacuation of the ascitic accumulation will result in a cure if the growth histologically proves to be a fibroma. It is sometimes difficult to distinguish these tumors by the microscope from fibro-sarcomata.

Finally there is a class of cases where it is exceedingly difficult to make a diagnosis of fluid in the peritoneal cavity associated with an ovarian growth. I refer to the so-called pseudo-mucinous ovarian cysts. In these cysts the walls are apt to rupture and allow the escape of the colloid-like material into the peritoneal cavity. The contents of such cysts are not fluid, but more nearly resemble masses of jelly. It has been called apple-sauce degeneration of an ovarian cyst. When such a fluid occupies the abdominal cavity, one can see that the signs will differ materially from those where we have to deal with a serous fluid. This material clings to the abdominal wall and the surface of the intestines. It may cause changes in the epithelial layer, and such changes in connection with ruptured pseudo-mucinous cysts give rise to what is known as pseudo-myxoma-peritonei. When such a cyst ruptures and its contents are poured out into the peritoneal cavity, a low grade of peritoneal inflammation is set up. Such an abdomen will be tender and held perfectly rigid by the involuntary contractions of the recti muscles. A fluid wave will be absent. Percussion will show not only dullness in the median line, but also in the flanks. The percussion note will not change on change of position, because the contents are too thick to flow to the other side of the abdomen. Such cysts can be diagnosed by considering the history of abdominal enlargement originating in one side of the abdomen and gradually becoming symmetrical. Suddenly, there is a development of abdominal tenderness, accompanied by more or less fever. Then the signs noted above will be found present, viz.: dullness in the flanks and also in the median line, and no change of percussion note when the patient changes position. The prognosis in these cases will depend largely upon the length of time which has elapsed since the rupture of the cyst. If the colloid material has become organized, the mortality is considerable, no matter how thoroughly one may try

to wash the substance away at the time of operation. If, on the other hand, the peritoneum has not become changed, the removal of the cyst and the thorough washing out of the cavity ought to result in a cure. I have had four such cysts within the last three years with three deaths and one recovery.

THE TREATMENT OF COMPOUND FRACTURES.*

A. I. LAWBAUGH,
Calumet.

In the treatment of compound fractures it must be remembered that we are dealing with a lacerated wound of delicate structures, easily infected and of lowered vitality.

These fractures, regarded with extreme alarm in olden days, are still not to be treated in a careless manner. Chelius, of Heidelberg, wrote in 1821: "The inflammation is always very great and requires strict antiphlogistic treatment, blood-letting, leeches, cold applications, and opium, and that mortification and delirium tremens may occur, especially in old people, and that if sleep does not take place, death is the consequence. On dissection, frequently there is exudation on the archnoid, pus in the joints and in the sheaths of the tendons."

This picture brings to our minds constitutional disturbances from an infected wound improperly treated.

In the treatment of compound fractures, modern surgery has made advances which are not exceeded in any other branch of surgery. In modern hospital treatment, it has attained to a nearly perfect state, while in general practice outside of the hospital there yet remains much to be desired, yet by strict observance of well-defined lines of asepsis and immobilization, many useful limbs can be saved that formerly were the victims of that mutilating operation, amputation.

Compound fractures belong to the class of injuries which cannot receive too prompt and careful attention at the hands of the attending surgeon. In the treatment of this condition the first thing which the surgeon should have in mind is the wound, and the securing of its primary healing. Our effort, therefore, must always be to substitute a closed fracture for an open one, and then to treat the damaged bone on the ordinary principles.

With successful attention directed to this end, the fracture can often be quickly converted into a simple one.

The surgeon must "*start right,*" and nowhere else in surgery is this so important, and the surgeon can never hope by scrupulous later attention to atone for his laxness of the first dressing. I desire to particularly emphasize the matter of rigid asepsis and immobilization.

The surgeon should *never* attempt to manipulate the injured parts in the endeavor to make a diagnosis, until the patient has been placed in proper condition and place for good work. The fate of a

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compound fracture is largely decided by the first dressing. The same scrupulous care must be exercised in having all surroundings as perfect for an aseptic work as though a laparotomy is to be done; therefore the operating room of a hospital is the best place for work of this kind; if this is not attainable, then some place where such conditions *are* obtainable as near the same as possible, and never in the patient's bed-room.

A general anæsthetic should *always* be given, as it is as important here as in the operation of laparotomy that the patient should be non-resisting and surrounded by the most scrupulous attention to modern surgical details and all that that implies.

The skin should be shaved over a liberal area about the wound, and then thoroughly scrubbed with warm water and green soap for a considerable area from the wound; this scrubbing should involve every bit of skin, including wound edges. If the wound and surrounding parts have been soiled by oil or grease, the application of benzine with a little carbolic acid will effectually cleanse. While the scrubbing is going on the affected area should be freely irrigated with a 1,2000 solution of corrosive sublimate. This same skin area is then washed with alcohol or ether, and finally with antiseptic solution. Not until this systematic cleansing has been carried out can a proper and thorough exploration of the damage done and a decision reached of the steps necessary to be taken.

As the compound wound may vary in size from a minute puncture to an extensive laceration, the question whether to allow it to remain as it is or to enlarge it sufficiently to admit the entrance of a finger must rest wholly upon the conditions observed. Should there be little tendency to displacement of fragments, and the tissues beneath feel comparatively soft and relaxed, if the skin is pale and pliable, and little or no blood oozes from the wound, it should not be opened further. Indeed, under circumstances in which it may be fairly assumed that the small puncture was made by the pointed summit of a fragment which, having penetrated the integument, was instantly withdrawn, and but slight injuries to the soft tissues done, the simple application of a wet antiseptic dressing of a gauze pad is sufficient. The writer does not advise or advocate the sealing hermetically of a compound fracture by means of tincture of benzoin or collodion. The small amount of discharge is provided for by the gauze, the wound becomes occluded by scabs, and the fracture converted into a simple one.

On the other hand, if the wound is only minute, but is accompanied by marked displacement, or comminution of the fragments, tension of the limb, or bogginess beneath the integument; if the skin be red, turgid, and tense, or there is a constant oozing of blood from the wound, or a clot plugging it, the wound should be enlarged, or even a new one be made to give free access to the injured parts. Should the tissue beneath be found filled with blood, this must be thoroughly mopped away, and the bleeding point secured by ligation; if the bleeding comes from numerous small points, a temporary tampon may be used, to be removed in twenty-four (24) hours. Small particles of bone, which are entirely separated, and all foreign particles should be removed and lacerations of the muscles, tendons and nerves properly sutured. Masses of muscles completely detached should be removed. Large

fragments of bone, if completely separated from their vital connections, should be removed, unless of such size that their removal will prevent recovery with a useful limb. Under such circumstances they may be left with the hope that they may be free from infection, and may assist in securing a useful limb. In cases where the fractured bones are refractory, that is, do not remain in fair apposition, after all disturbing elements have been removed, then one of the methods in most general use for the purpose of securing apposition of the fragments is that of wiring them to one another. The ends of the fragments are perforated with a bone drill, and secured in close approximation by silver wire passed through the openings thus made, and twisted. In case of the separation being longitudinal, a strand of chromic gut can be passed around the parts, which will be sufficiently stable.

When a compound fracture implicates a joint which has not been so badly disorganized as to demand amputation or resection, the same general plan of treatment is applicable.

Drainage should be provided in the most dependent part, or in some cases it will be necessary to use one or more tubes, and at times a new wound for drainage exit must be made in the proper place. The wound then closed and a gauze dressing, wet with 1,2000 bichloride solution applied, and over all a copious sterile absorbent cotton pad, held snugly in place by the bandage.

We now come to the difficult question of support and immobilization, for, as John Hunter said: "The first great requisite for the restoration of injured parts is rest." For broken bones which are not held strictly at rest, keep up an irritation of the wounded soft parts, delay healing, favor the continued outpouring of a serohemorrhagic exudate, and so provide a medium for the development of micro-organisms, which may lead to the loss of limb.

A very useful apparatus for compound fractures is found in the plaster of Paris dressing, with a trap-door cut over the seat of fracture, which permits access to the wound when necessary.

A safe general rule in all fractures of the long bones, that the adjacent joints at either extremity must be immobilized by inclusion in the same fixed dressing, otherwise the play of the muscles would not be held in check, and with the movement of the joints there would be a constant displacement of fragments.

The apparatus should also be made as comfortable as possible for the patient, and in case of the lower limbs, some provision should be made for swinging the limb. In case plaster of Paris has been used, a wire with hooks, incorporated in the anterior surface of splint, will prove efficient.

I have for many years been using the wire suspension splint devised by the late Dr. Hodgen, of St. Louis, with excellent success. It fulfills *all* the indications necessary in cases of compound fracture of the lower limbs.

Usually drainage can be dispensed with by the end of the first week, unless suppuration has taken place, when a longer period is necessary. An elevation of temperature may occur from the absorption of blood products, and not due to sepsis or beginning suppuration, and should not mislead the surgeon.

Occasionally the soft parts have been so severely damaged that portions of tissue adjacent to the fracture become necrotic, and then frequent and thorough

irrigation becomes necessary so that the slough may separate without causing infection and prevent bone suppuration. This detail cannot be too strongly impressed, for the cessation of suppuration and prevention of infection is essential to the union of the fragments, while its continuance delays repair and perhaps causes ultimate sacrifice of the limb.

The guiding principles, therefore, in the treatment of compound fracture are:

Thorough cleansing and rigid asepsis, drainage and careful immobilization, will enable the surgeon to save limbs which at first sight seemed hopelessly lost.

There is never an immediate necessity for amputation in which there is sufficient circulation to sustain the parts and sufficient tissue to preserve a useful limb.

Only in the case of the most severe crushing can amputation take the place of the conservative though tedious prospect of saving treatment.

DISCUSSION.

W. T. Dodge, Big Rapids: I have not been able to hear very much of the paper on account of the accoustic properties of the hall being so poor. I have formed my idea of the paper from the abstract printed in the programme. Unless the principles advocated in the abstract are modified somewhat by the text of the article, I wish to dissent somewhat from the conclusions given in the most severe cases of compound fracture.

If these conclusions and these directions as to tratment are given concerning cases of fracture of the leg, with incidental puncture of the skin and without much destruction or brusing of the soft parts, I am willing to agree with the directions, but in my personal experience in compound fractures of the limbs, which has been considerable, the number of simple cases of fracture, with incidental puncture of the skin, which can be easily converted into simple fractures, are very small, compared with the cases of extensive bruising and destruction of the soft parts. In those cases I protest against the increased traumatism being afforded to the soft parts by violent efforts to produce asepsis. It is absolutely impossible to produce complete asepsis in a limb which has been crushed between two logs. Dirt, debris and germs, have been driven into the tissues. The tissues have lost their vitality; their blood supply has been cut off, there is going to be sloughing and further loss of tissue, and the more the traumatism already received is added to, the more sloughing there will be and the more danger there will be of finally having to amputate the leg.

I had the honor a number of years ago to read a paper upon this subject before this section, and took the position as a result of my experience that in the severe cases of compound fracture of the leg, no elaborate attempt should be made to produce asepsis, by scrubbing with the brushes and things of that sort. The attempts to produce cleanliness, should be confined to the use of a weak anti-septic solution; the parts should be irrigated and washed out as completely as possible; as much cleanliness should be resorted to as could be used without adding to the great traumatism already received; in the worst cases no immediate attempts should be made to put the bone in proper apposition, but the limbs should be placed upon a level surface, surrounded by warm antiseptic applications, rendered as straight as possible perhaps, but left for nature to produce re-action, left for the inevitable sloughing of the diseased or damaged tissues to take place, and for nature to produce a re-action in that limb, and then gradually pull it in proper position, retaining the parts there with some simple dressings that can be destroyed every time the dressing is renewed.

Our old friend, whom I never have heretofore failed to see at meetings of this section, who passed away since the last meeting of this Society, Donald McLean, used to suggest the application of folded newspapers to these cases, and a few years ago he reported here a classical case of severe compound fractures of both limbs received in a Michigan Central wreck, which he saved by this means of treatment. I may say in tribute to his memory that it was his suggestion in regard to that case that permitted me to save limbs that I would otherwise have amputated when I first saw them, and that can be saved by these conservative methods, that would certainly be lost if any further traumatism is to be added to the already severely bruised and damaged limb.

T. A. McGraw, Detroit: I differ so much from what has just been said on this subject that I cannot help expressing myself about it.

What have we in a compound fracture, as the doctor says? In the first place we have septic

elements driven in. The very fundamental thing is to get them out if you can. It is not always possible where there has been great smashing, great bruising, but the effort should be made.

The next thing is to immobilize that leg, fix it so that it cannot stir. What worse injury can you do to a broken bone than to put it just loose, lying upon something or nothing, in a fracture box or on a pillow, and let every motion of the man drive the fragments of bone into that broken and injured flesh?

Now, in St. Mary's hospital, Detroit, where we have any amount of compound fractures and very bad compound fractures, the first thing we do always is as far as possible to render the leg first of all aseptic. As for adding by that process any injury to the leg why I disclaim it altogether. You can make a leg aseptic. You can wash it out, you can inject it, make some incisions through some of the dense parts of the surrounding tissues, in order to get at it, wash out the leg thoroughly with your douches and your antiseptic solutions. You can accomplish this without any additional injury. Now, not all such legs recover. Sometimes the injury has been too severe. To leave such a leg just lying loose to wobble, I think is the worst surgery that anybody can do. That is my judgment about it.

I agree with the last speaker in one thing, among the best splints you can put on for the purpose of immobilizing the leg, is a wire splint. The wire splint I prefer is Cabots splint, and especially where the fracture is of the lower leg. If you have a fracture of the lower leg, you take a Cabot splint of wire, and bind the foot first of all snugly down on to the foot piece of that splint with adhesive plaster. You then make traction upon it, put your adhesive plaster also around the leg above and thus get both your extension and your contra extension by adhesive plaster. You have got the most comfortable splint that any man can put on to a broken leg, and especially for a fracture below the knee. We use it also there in St. Mary's hospital for fractures of the thigh, but the very essence as I understand it to-day, as I see it in my practice, the very essence of treating a badly smashed broken leg, is first of all to render it just as aseptic as possible, if necessary incise some of the tissues, let out some of the coagulated blood, wash it out, then put it in a splint where it can be kept absolutely and perfectly immobile, and if necessary swing it up.

I was called in one case in consultation, where a young girl had got her leg smashed by a horse stepping on it. Her surgeon had been treating it for several weeks trying to overcome the compound fracture, with the plaster of Paris bandage.

We changed that, put on one of the Cabot splints, swung the leg up, and kept it perfectly immobile. The suppuration subsided and there was a perfect recovery.

E. B. Smith, Detroit: I think these two gentlemen have gone to the extreme. They have both gone too far to the right. Now, I don't believe anybody will think Dr. Dodge means that a limb which is fractured in two or three different places can be laid in bed and moved about freely; nor do I think that Dr. McGraw means that he would put the splint up so tightly that the blood could not freely circulate through the lower extremities. There is a happy medium. We all believe the parts should be taken care of antiseptically. Whatever hemorrhage there is should be controlled. If there is concealed hemorrhage it should be found. I don't think Dr. Dodge would say that it should go on, but yet he does say that we should not increase the shock, and that we should not increase the trauma any more than is necessary.

As far as keeping a fractured limb absolutely in place, I think every surgeon will say that is quite impossible. When you have given chloroform to a patient and reduced the fracture, it might be misplaced while the patient is coming out of the anæsthetic. I think we have all seen that, but where we err is in this: how we put on our splint, whatever it may be. It doesn't make any difference to me if it is only newspapers. I can get just as good results from them as I can from the wire, which I have used very often.

If we get the splint above the fracture far enough to get the muscles that are beyond their local attachment above where the fracture shows itself, that, I think, is the secret of success. First control the hemorrhage, then put the structures in apposition, not only the bony tissue but the periosteum and muscle. Then stitch the soft structures together. In fact do the suturing as you would in laparotomy. Having done this, apply the splint padded to fit the part. Never pad the patient. As I said before place the splint so as to immobilize the muscles above the seat of fracture.

For instance, we take the ambulatory splint, and put that on a fracture of the leg and allow the patient to walk up and down. Now, those muscles are used some, and yet there is no better results from any treatment than from the ambulatory splint treatment.

C. B. Nancrede, Ann Arbor: I think in this discussion I should take a decided and unqualified stand by T. A. McGraw. I do not see any necessity to add shock or traumatism to a dangerous degree when attempting to secure asepsis, any more than he does. I do not think that there is any necessity for, nor did Dr. McGraw declare that one kind of splint was the only variety that could secure fixation; nor did he claim, nor does anyone claim that you can always secure perfect coaptation at the beginning and maintain it, but it is certainly every ones business to come as near to that as they can. There is no occasion to employ such an amount of constricting force as would interfere with the entrance of the blood into the part or its exit from that part.

This subject cannot possibly be adequately covered in two, or three, or four, or five, or ten, or twenty, or a hundred minutes, but I would just like to call the attention of the section to the fact that was observed—actually experimentally demonstrated—about forty years ago by Billroth, who found that the difference in results secured in compound (open) fractures when the ordinary removable dressings were employed and when fixed dressings were used was enormous. The ordinary dressings secured the safe amount of fixation that has been talked about without really securing fixation, which led to slight traumatisms of the tissues by the fragments and the re-infection of the tissues until most serious results often followed. How does anyone know that he is going to have all of these tremendously bad results that are claimed result from careful asepsis and reduction. How many of us have seen very bad looking compound fractures, where we have secured asepsis, where perhaps very little sepsis was to be overcome, with extensive laceration of muscles, where we have sutured nerves, have put bones in admirable position, where they have been secured with these alleged undesirable methods, where they have behaved almost as if they had been ordinarily simple fractures? How many times has that happened? Frequently. What right has anyone to assume that every case of bad looking fracture is going to behave badly, and when you have found that it has not behaved badly, how are you going to successfully reduce those fractures which you left in bad shape because you dreaded complications which never occurred? How are you now going to get the best possible reduction which was originally attainable? You cannot do it, it is too late, except by operative methods, and often, not then.

H. O. Walker, Detroit: There can be no happy medium about the treatment of fractures, simple or compound. I fully agree with the expression of McGraw and Nancrede in their treatment of fractures. Give the patient an anæsthetic, reduce and permanently dress the fracture. Plaster of Paris has served me best in the treatment of fractures of the long bones. The plastic plaster of Paris gives opportunity for accurately molding the splint to the parts while it is hardening. The point of fracture is easily gotten at for inspection by cutting plaster before dry with a sharp knife along and over a strip of binders' board (one inch wide) which has been previously introduced under before the plaster bandage is applied. If extension is required, wire with a loop at each end can be incorporated in the plaster, and to which can be attached rubber tubing for the extension. I am in favor of fastening the fractured ends together in compound fractures, with wire or what is better, large thirty day chromocized catgut. There is no reason why you should not get just as good results in compound as simple fractures, except where the soft parts have been badly crushed. Dennis reports the treatment of several hundred cases of compound fracture with a death record of one-third of one per cent., a great contrast to the results obtained before the days of antisepsis.

Some one aked: What about the ribs and the clavicle, doctor, do you treat them the same way?

Fix them any way that you choose, either with plaster of Paris or other means, so that they are immobilized. I have treated many fractures of the clavicle and ribs with plaster and the results have been good. The fixture of a broken clavicle with wire or chromocized catgut is an excellent method. I wish to emphasize the necessity of anæsthetizing the patient before adjustment and mobilizing of the fracture. It does away with pain and gives you full opportunity to do the right thing.

Wm. Fuller, Grand Rapids: The acoustic properties of this room are so bad that I have been unable to hear much of what has been said. I shall be obliged to express opinions without referance to what others have stated. I do not believe in adhering strictly to absolute immobolization in the treatment of compound fractures in the early stages. The dressing should be loosely applied so as not to interfere with the circulation and some allowance must be made for swelling. I generally use a pillow pinned around the leg from the knee down to include the foot with a strip of thin board on either side secured by a

bandage. The wound ought to be made aseptic if possible, or treated by free drainage should inflammation ensue. Either method is equally successful although a case treated by free drainage may require more care and trouble on the part of the surgeon. Cases treated in either way will recover in about the same length of time. The splint I generally use later is one that fits either leg and one of any size from the child to the adult although it is better to have a long one and a short one for children. It is simple and inexpensive. It consists of a light flat bar of iron bent so as to pass from the hip on the outer side to six inches below the foot, turned at right angles four inches across the sole and again at right angles upon the inner side of the limb to the groin. Short pieces of hoop iron are riveted across the ends in order to fix them in a plaster bandage around the pelvis and upper part of the thigh. The side irons are adjusted so as to be about four inches wider apart than the size of the leg and thigh and bent to fit the contour of the limb. Bandages are now tied across from one side to the other beneath the limb from the upper part of the thigh to the heel. The foot is supported by an adjustable foot-piece which is movable upon the lateral iron bars and by it extension is easily made. The end of the splint is fastened by a rope to the ceiling. The limb may be bandaged if necessary by using short pieces of bandage successively applied each fastened at the ends by adhesive plaster. All dressings and bandages can be easily removed or applied without disturbing the limb or hurting the patient.

Hugh McColl, Lapeer: It brings me back to thirty years ago or thereabouts, when I presented a paper on fractures of the leg before this Society, and you are going over the same ground, you are hashing over the same stuff that we hashed over then. There isn't anything new from that time to to-day. We had reports of cases that were treated by plaster of Paris. I reported at that time 123 cases of fractures of the leg treated with the plaster of Paris, without a bad result. These were all treated in the woods, in the lumber woods, where I had to dress them, take care of them in the lumber santy. We had all sorts of injuries, and we had the same thing, the same discussions and nothing new from that time to this in the way of fractures.

A. W. Hornbogen, Marquette: I can say that I heartily agree with everything that has been said in Dr. Lawbaugh's paper. I don't think—the way he placed things—that there has been much of a chance for argument. Drs. Nancrede, McGraw, Walker, and others, and I think the great majority of us all, agree that perfect asepsis and immobilization, regardless of what form of immobilization used, is the proper thing to do.

There is one point that I would wish to bring out in compound fractures, that was not brought out in the paper, that I have found to be beneficial, for instance, in severe cases of compound fracture, to decide at the time whether it is proper to amputate at once or whether you can save the leg. That point I think is a question where we are often in doubt whether we ought to try and save the leg or to amputate it. Of course there are some cases where it is so severe that you can readily see you cannot save it, of course you amputate it. Others again it is apparently difficult to arrive at a decision whether to amputate or not. A method that I have used for the last 15 or 16 years would probably assist some of the members present, in cases of compound fracture, and that is to elevate the limb and put on an Esmarch constrictor, bring the limb down to the horizontal position, remove the Esmarch, and if you get that rosy hue the chances are that you can save the limb, but if there is no reaction, amputate it.

A. I. Lawbaugh, Calumet: I don't know as I have anything more to add to what I have said before. I have been in this work for the last thirty years and I have had a great deal of experience in these injuries, employed in a mining community, where we have those fractures very frequently. When I first began practice we did not employ the rigid asepsis that we do now and our results certainly were very poor, but since we have acted on the principles which I enunciated in my paper, our results have been good, in fact we lose but very few limbs. One gentleman said it was rather difficult to put on your dressing when you had the fracture reduced, and coming out of the anæsthetic. I tell you that we put on the dressing before they come out from the anæsthetic, and I certainly simply reiterate what I said in my paper, "Rigid asepsis and immobilization."

RENAL HEMATURIA OF UNEXPLAINED ORIGIN, CESSATION AFTER NEPHROTOMY.*

BENJAMIN R. SCHENCK,
Detroit.

Hematuria, as a symptom of renal disease, may be caused by several different affections of the kidney. It most frequently shows itself in cases of calculus and new growth, is not infrequent in tuberculosis, occurs in chronic as well as in acute nephritis and is sometimes seen in movable kidney. Besides these well recognized cases there occur others, forming an obscure group, not well defined, but little understood and usually designated by the meaningless terms "idiopathic" and "essential."

During the past one hundred years the views concerning the etiology of the cases in this group have undergone radical changes. Roughly speaking, there have been three periods in the development of our knowledge of such cases, or perhaps one might better say that there have been three epochs, in the course of which the views have been changed, without, however, throwing much light on the underlying cause.

During the first period, the older writers simply classified those cases in which the etiology was obscure as "iodiopathic hematuria," referring the cause to such ill-defined and unreliable factors as "exposure to dampness," "catching cold," etc. Thus, Rayér,[1] one of the most brilliant writers in the early part of the last century, in his *Traite des maladies des reins* (1837), a work on kidney diseases in some respects unsurpassed to-day, devotes a whole chapter to the subject, considering idiopathic hematuria not as proven but nevertheless of common occurrence.

Then, in the following epoch, marked by great activity in the field of histologic pathology, when the attempt was eagerly made to explain all symptoms by reference to pathologic changes, the so-called essential hematuria was lost sight of and it was quite generally held that bleeding from the kidney is always caused by some morbid process.

During the past twenty years, however, the ideas have been again modified, for, with the development of renal surgery, permitting the far more frequent examination of the organ presumably diseased, fairly numerous cases were found in which an exploratory nephrotomy, undertaken on account of hematuria supposedly caused by calculus or tuberculosis, proved disappointing. Nearly every surgeon has had cases presenting bleeding and perhaps pain, has exposed the kidney thought to be at fault and either by needling or by an incision, has found nothing whatever to account for the hemorrhage. The kidney has been replaced and in a certain percentage of cases the bleeding has ceased. Such experiences have led to the more or less general belief in the older idea, that renal hematuria can occur, independent of pathologic change and hence our more recent classifications again include a group, variously styled "renal hemophilia," "angio-neurotic hematuria,"

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"nephralge hematurique," "renal epistaxis" and "hematuria arising from sound kidneys."

Two different theories have been given prominence in the discussion which has taken place on this subject. The prevailing one is that of Klemperer,[2] who explains the bleeding by supposing that there exists a disturbance of the vasomotors—a paralysis of the vaso-constrictors, causing a dilatation of the blood vessels and a consequent diapedesis of red blood corpuscles, hence the term angio-neurotic. Klemperer argues "we have no doubt of the occurrence of angio-neurotic œdema and why should not angio-neurotic disturbances take place in the kidney as well as in the skin?"

Senator,[3] on the other hand, presupposes a local hemophilia or a hemophilia confined to one organ. I can find little in the arguments brought forward in support of this idea.

If we admit the possibility of such a cause or causes, the following case, observed by the writer in Baltimore, would seem to fall in this group.

Mrs. J. C., a woman of 46 years, first consulted me on September 23, 1902. She complained of passing large quantities of blood in the urine and of a persistent backache. The history was briefly as follows:

While never very strong or robust, she had had but few illnesses, recalling only an attack of typhoid fever 27 years previously. Although living in a district where malarial fever prevails, the possibility of her ever having become infected was very carefully excluded. She was the mother of four children and had passed through her marital and menstrual history without mishap.

In May, 1902, five months before the consultation and when in her usual health, she first noticed blood in the urine and began to have a dull backache. At first the hemorrhage was intermittent, but during the summer, blood constantly appeared, without much variation in amount. There was no history of sharp attacks of pain and nothing in the patient's account of her illness to point to the source of the hemorrhage, except the fact that the aching had perhaps been a little more severe on the left side. There was no disturbance of micturition and no sediment had been noticed in the urine. Since the onset of the trouble, loss of strength had been marked and there had been a decrease in weight of about six pounds.

On physical examination, Mrs. C. was found to be poorly nourished but the color of the mucous membranes was fairly good. The heart and lungs were normal and the pulse, which was 72 to the minute, was of good volume and tension. The abdomen was flat and natural in appearance with no bulging in the flanks. On palpation there was no resistance and no tenderness. Neither kidney could be felt, nor could tenderness be elicited in either kidney region or along the course of the ureters.

The blood examination showed 7,000 leucocytes and 65 per cent. of hemoglobin.

Cystoscopic examination. With the patient in the dorsal position, a sterile catheter was introduced into the bladder and about 50 cubic centimeters of bloody urine withdrawn. Cultures were made on agar-agar, which subsequently proved to be sterile. The knee-chest position was then assumed and a No. 10 Kelly cystoscope introduced. The bladder walls appeared slightly blood stained but otherwise

normal and the ureteral orifices seemed natural. Renal catheters were inserted and about 15 cubic centimeters of urine collected from each side, that from the left being intimately mixed with blood while that from the right was clear. Cultures from both sides proved to be sterile.

Urinary examination. *Mixed specimen.* Brownish-red; specific gravity 1022; faintly acid; no sugar; considerable albumen. Abundant granular sediment, consisting of red blood cells and a few epithelial cells; no casts.

From right kidney. Pale yellow; clear; acid; no albumen. Urea 15 grammes to the liter. Flocculent percipitate, consisting of phosphates and a few epithelial cells; no blood; no casts.

From left kidney. Brownish-red; cloudy; neutral; considerable albumen. Urea 15 grammes to the liter. Heavy granular percipitate, consisting of blood cells and epithelial cells; no casts. Several specimens were stained for tubercle bacilli, none being found.

On October 1st, 3 mmg. of tuberculin were injected. There was no reaction.

For the next four weeks the patient was kept under observation. During this time the blood was continuously passed and the backache persisted. Specimens from the urine were repeatedly stained and examined for tubercle bacilli but without result. On October 30th the patient was admitted to the Johns Hopkins Hospital, in the service of Dr. Howard Kelly.

As all our means of diagnosis were exhausted without arriving at a conclusion, an exploratory nephrotomy was decided upon and this was done by Doctor Kelly.

Operation. Before administering the anæsthetic, the left ureter was catheterized and the catheter left in place. Ether was then given and with the patient lying over an Edebohls' bag,[4] the kidney was exposed and brought out onto the loin. There were no adhesions and externally the kidney appeared to be perfectly normal. By means of a gravity apparatus, attached to the catheter, the pelvis of the kidney was now distended with salt solution and while the assistant controlled the hemorrhage by pressure on the pedicle, a longitudinal incision was made through the cortex in the line advocated by Broedel[5] (just posterior to the posterior border of the kidney; the line, along which the anterior and posterior branches of the renal artery meet and through which an incision severs the fewest possible vessels.) The distention of the pelvis and calyces simplified their examination, as it kept the tissues from becoming blood stained. A most careful search failed to reveal any abnormality, either of the pelvis or parenchyma.

A liberal sized piece of the cortex was removed for microscopic study, the kidney sutured with through and through stitches of fine cat gut, replaced and firmly held in position by packing with iodoform gauze.

Convalescence. The after history was uneventful. On November 10, 1902, I again catheterized the left ureter and found that the kidney was excreting its normal portion of urine. This was still blood tinged but of a much lighter tint than before the nephrotomy.

Blood continued in the urine, in decreasing amounts, until November 27, 1902, when it completely disappeared and has not thus far returned. The patient's general health has been excellent.

Pathologic report. Microscopic examination of the tissue removed showed it to be perfectly normal.

We have then in this case, hematuria, the cause of which remains a complete mystery. There was no bacteriologic infection, for the urine was proven to be sterile on two different occasions. Calculus and tuberculosis were carefully excluded. There was no nephroptosis. There were no microscopic lesions and no microscopic alterations in the portion removed. The bleeding did not cease because of atrophy, consequent upon the operation, as may be conceived, for a subsequent catheterization showed that the kidney was excreting urine in the same amount as before the nephrotomy.

Shall we then say that it was a case of hematuria from an anatomically sound kidney and thus admit that this can occur? With the idea of ascertaining what pathologic evidence there is in favor of the existence of a true idiopathic hematuria, I have examined the literature of the past fifteen years. Fairly numerous reports of such cases occur and they may be divided into two groups—(1) those from the medical clinics and (2) those from the surgical clinics. The former are much the more numerous but, as the diagnosis rests on negative findings and on cessation after treatment, without the true condition of the kidney ever having been learned, such reports furnish no scientific evidence.

In order to prove that bleeding comes from a sound kidney, it is necessary to demonstrate (1) that the hemorrhage is renal. This can be done, with certainty, only by the catheterization of the ureter. (2) The kidney must be subjected not only to exposure with palpation, needling or even longitudinal incision, but there must also be a microscopic examination of a portion of the renal tissue. Even when this latter test is applied, it is conceivable that the part of the organ from which no specimen is taken may be diseased and the cause of the hemorrhage.

Excluding movable kidney, I have studied 19 cases reported under one or another of these headings. There are numerous others, as in the list reported by Harris,[6] but these I have not included as there are obvious facts given, which might well account for the hemorrhage.

Most of these cases which have been cited time and again throughout the literature as proving the existence of hematuria from normal kidneys may be divided into two classes:

A. Those in which the examination has been macroscopic only.

B. Those in which the microscope revealed evidences of interstitial nephritis but have been reported as cases of idiopathic hematuria, because the author either disregarded or was ignorant of the fact that bleeding may occur in chronic nephritis.

That the macroscopic examination alone is insufficient, especially if the kidney be simply exposed and palpated, without an incision through the cortex, is, I think, evident when one considers how frequently are seen, at autopsies, kidneys, externally apparently perfectly healthy but on incision found to contain a small stone, a general interstitial inflammation, a focus of tuberculosis, or more rarely a new growth.

In the cases reported by Anderson,[7] Broca[8] and Passet,[9] the kidney was simply exposed and palpated. In those of Durham,[10] Abbe,[11] Legeau,[12] Oliver[13] (Case II.), Guyon[14], Loumeau[15], Harris[16], Rovsing[17] and Debesaques[18] the organ

was incised and carefully examined but not studied microscopically.

In the other group, microscopic sections were made and areas of interstitial nephritis of varying sizes were found. Such was the case in the reports of Sebatier[19], Senator[20], Oliver (Case I.) Floderus[21] and McGowan[22].

After excluding these cases, there remain two unexplained, one reported by Klemperer[23] and the other by Schede[24].

Klemperer's case was that of a male, aged 22, who had always been healthy and had no hereditary tendencies. A year before coming under Klemperer's observation, he suffered for three months with bloody urine but this disappeared and he remained free from it for nine months. It then returned and a cystoscopic examination revealed blood coming from the left ureter. Except for the blood, the urine was normal. After the hematuria had continued for four months, nephrectomy was done. The whole kidney was carefully examined by the best authorities and pronounced absolutely normal. Five years later the bleeding had not returned.

Schede's patient was a man, aged 50, who had had hematuria for several months, producing marked anæmia and baffling all attempts at explanation. After a supra-pubic cystostomy, the ureters were catheterized, the source of the hemorrhage learned and the kidney removed. It proved to be perfectly normal.

Is our case similiar to these or was there a microscopic lesion of some unexamined portion of the kidney? The piece removed for histologic study was relatively small and might easily have been from a portion of the parenchyma which was sound. The case was more carefully studied than were most of those cited as examples of iodopathic hematuria and nothing was found to explain the hemorrhage. Still, I would prefer to adopt the view, advocated by Israel[25] and Rovsing[26], that there was a cause—an undiscovered one—rather than to assert that it is an example of bleeding from an anatomically sound kidney.

In view of the fact that there are thus far on record but two cases which apparently prove that bleeding may take place from a kidney which is not the seat of a pathologic change, it would seem far better to me to put them aside as yet unexplained than to admit into our classification a group such as I have named.

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CHRONIC PROCTITIS AND SIGMOIDITIS.*

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Saginaw.

It is not my intention to enter into the minute anatomy of the rectum and sigmoid; but it is well for us to remember that the sigmoid is the narrowest part of the colon, that it curves in the first place upwards, and then descends vertically and to one side or the other, like the letter S, hence the name. It is held in place by a loose fold of peritoneum, the sigmoid meso-colon. The rectum is cylindrical, not sacculated like the rest of the large intestine; it is narrower at its upper part than the sigmoid flexure, gradually increases in size as it descends, and immediately above the anus presents a considerable dilation, capable of acquiring an enormous size. The mucous membrane of the colon is a grayish or pale yellow, while that of the rectum is thicker and of a darker red color. There are certain permanent folds of a semilunar shape, called Houston's valves, the usual number being three, while we may find four, or only two in some cases.

There are simple follicles and solitary glands in both rectum and sigmoid .

Chronic proctitis is a long continued inflammation of the rectal mucosa, which extends to the underlying tissues in some cases. More cases of chronic proctitis are met with in adults than in children, and it has been my experience that more women than men are afflicted with it.

Chronic proctitis, as a rule, is secondary to the acute form, which is induced by so many exciting causes that I shall not attempt to enumerate them all, but would mention as some of them, exposure to cold or intense heat, traumatism, operations for piles, injection of internal piles with carbolic acid solutions, drastic purgatives, worms, indigestible foods, irritating discharges from the upper bowel, injury to the mucous membrane by the enema point, also the discharges from blind internal fistulæ, and wounds which refuse to heal after rectal operations.

The symptoms become somewhat modified when the acute catarrhal proctitis has passed into the chronic form; the acute pain and tenderness give place to rather a sense of weight and fulness than actual pain. The discharges are also altered; while at first it consists of a tolerably intimate mixture of blood and mucus, now it becomes more purulent, and if blood is present it exists as streaks in the pus, which have evidently arisen from ulcerations of the mucous membrane rather than from a general oozing from the inflamed surface. We find the mucous membrane appears more thickened and indurated, but the œdema is less than in the acute form.

There are two varieties of chronic proctitis—the atrophic and hypertrophic.

Atrophic is not as frequent as hypertrophic proctitis. The mucous membrane appears dry and harsh, with small fæcal crusts clinging to it. The mucous membrane is not as highly colored as in hypertrophic variety, but it cracks easily when distended by the passing fæces or the introduction of a proctoscope, and many small bleeding points can be seen on its surface.

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There is a dry, parchment-like condition of the skin and mucous membrane of the anal region, associated with fissures.

In hypertrophic proctitis there is always a thickening of the mucous membrane and submucosa, together with an increase in the number of mucus cells. Bacteriologists find in the muco-purulent scrapings, pus cells, leucocytes, and various bacteria, undigested particles of food, and small pieces of fæcal matter.

The cause of hypertrophic proctitis is either within or without the intestine—either following an acute attack, or the result of adhesive bands constricting the colon—and thus causing congestion. Abdominal tumors or a rtroflexed or enlarged uterus pressing upon the intestine, or movable kidney, or a catarrhal inflammation of the appendix, may be the exciting cause.

The symptoms are not definite in the earlier stages of the disease, except it follows an acute inflammation, when there is a lessening of the acute symptoms, and a gradual development of the chronic. The disease gradually extends to the sigmoid flexure and colon, and the symptoms may be referred to either of these localities. The symptoms are loss of appetite, tenesmus, flatulence, and a general weakness; the tongue is flabby and coated white; constipation alternates with diarrhœa; the stools are either soft, watery and mixed with muco-pus, or they are hard, dry, round balls, covered with muco-purulent secretion. After a time when there is a greater disturbance of the digestion and constitution, the tenesmus comes on periodically, followed by the discharge of a thick, glairy, mucus mixed with pus, and at times with blood.

There is always great exhaustion following the discharge of mucus. The patient complains of a weight and discomfort in the lower rectum. The mucous membrane secretes profusely, and from the oozing through the anal opening, the parts are kept moist and macerated, thereby producing a dermatitis, and severe pruritus. The discharge is profuse enough in some cases to necessitate the wearing of a bandage at all times. The patient will have a feeling of not having had a complete bowel movement, and there is a severe burning and itching sensation. The constipation gradually increases, bowel movements only occurring after the greatest effort. Either large doses of medicine, or colonic flushings, are required to produce a bowel movement. Then there will be distention of the abdomen from the intestinal gases, griping, nausea, and vomiting. Nervous symptoms are developed and the patient becomes apprehensive and hypochondrical.

The treatment must necessarily vary according to the cause of the inflammation, and we must not promise to cure our patients within a short time, for it is very likely to require months if not years. When the exciting cause is within the intestine, we must remove it, whether it is hardened fæcal masses, fermenting intestinal products, or other foreign substances, and for this purpose I prefer sulphate of magnesia given in tablespoonful doses in a glass of hot water, repeated every three or four hours, until there are eight or ten bowel movements. After this the colon should be flushed with normal salt solution, the patient being in the knee-chest posture. The fluid can be introduced into the colon easily by means of a Wales bougie passed through the sigmoid flexure. The injection fluid should pass into the intestine slowly, and until the bowel is fully distended, and then retained, if

possible, for fifteen minutes before it is expelled. Thereafter, with the patient in the knee-chest posture, daily injections should be made of either one drachm ichthyol, three drachms non-alcoholic hydrastis, or ten grains protargol to two quarts warm water. If upon making a proctoscopic examination, there are seen to be numerous small bleeding points on the mucous membrane, it can be mopped with a five per cent. solution of silver nitrate, or an atomizer used.

The bowels should be regulated if necesary with medicines; in cases of constipation I have been pleased with the employment of maltine and cascara taken in sufficiently large doses to produce one good bowel movement daily. The diet should be mostly nitrogenous, crusts of stale bread, or gluten bread, meats, fish, chicken, eggs, are all good, while potatoes should not be eaten. Small amounts of thoroughly cooked rice are permissable, as are all vegetables containing but little starch or sugar. Hot water, drank half an hour before meals, has a beneficial effect. If the flatulency is great, remedies to control the fermentation must be given, as carbolic acid, salol, pancreatin, etc. When the exciting cause is without the intestine, as a floating kidney, retroflexed uterus, or a hypersensitive appendix, one must be careful not to promise too much from the local treatments, for perhaps an operation may be necessary before the cure is accomplished. I quote Dr. Jas. P. Tuttle, who says: "It may be asked why we do not operate immediately in such cases. If it is an extremely chronic condition, and modern treatment has been tried without effect, then it would be perfectly proper to do so. But where the case is a subacute one, when the condition has lasted only two or three months, where no proper dietary regimen and local treatment have been carried out, one cannot say that all the therapeutic measures have been exhausted, these should be tried before any serious operation is undertaken, provided life and general health are not endangered by such delay."

In my judgment, Dr. Tuttle has stated exactly what should be done in these cases, and that the surgeon should be conservative at all times (and by conservative I do not mean a criminal neglect to operate when the case demands it) making use of the approved medical and electrical treatment of such conditions. Some of the results obtained by the employment of electricity are certainly remarkable, and this agent should be employed when feasible.

Ulcer of Stomach and Duodenum (Conclusions):

1. Gastric ulcer is rare in the Johns Hopkins Hospital as compared with cancer, the respective incidences being 1 to 225 and 1 to 56 general admissions.

2. Gastric ulcer in our series was as common in the male as in the female. In the male, the percentage of greatest frequency was between the ages of forty and fifty—a decade later than usual.

3. Ulcer was in our cases relatively more frequent in the colored race and among Germans.

4. Vomiting occurred in 85.3 per cent.; pain in 82.9 per cent., and haematemesis in 75.6 per cent.

5. Great loss of weight may be present; thus in 36 cases there was a loss of more than ten pounds, and in 9 of forty pounds or more.

6. Our statistics would indicate that hyperchlorhydria is not so constant as usually maintained; it was present in only 17.6 per cent. of our cases.

7. The blood picture is one of chloranæmia, as seen from the average count (haemoglobin, 58 per cent.; red blood corpuscles, 4,071,000; white blood corpuscles, 7,500 per c. mm.)

8. Haemorrhage was the cause of death in 8.5 per cent. of the total number of cases, and in 29.5 per cent. of the fatal cases.

9. Perforation is rare (3 cases, or 3.6 per cent. of our series). General peritonitis occurred in but one instance (1.2 per cent).

10. Ulcus carcinomatosum is rare—at least 4.8 per cent. of our series.

11. Operation is indicated in all cases with perforation or perigastric adhesions, and in cases of copious or recurring haemorrhage, when medical means have failed after a fair trial.

12. The mortality of the series was 29.3 per cent.; in the cases, however, who received treatment, there was a mortality of only 18.8 per cent.; in those receiving medical treatment alone, 8.6 per cent. (*The American Journal of the Medical Sciences,* December, 1904. CAMPBELL P. HOWARD.)

MYELITIS COMPLICATING CANCER OF THE BREAST, REPORT OF A CASE.*

F. B. WALKER,
Detroit.

In bringing before you the subject of mammary cancer, it is not my intention to rehash the whole matter, but rather to relate an unusual case and refer briefly to some pertinent facts suggested by it.

Mrs. M., aged 43 years, consulted me first in August, 1903, complaining of general ill health and of pains in the back, especially over the region of the left shoulder blade. With the exception of two pregnancies and the usual attending disabilities, her health up to this time had been uniformly good. Inspection disclosed nothing. On palpation she exhibited slight tenderness over the upper dorsal spines and adjacent muscles. There was no fever or acceleration of pulse. Examinations of urine and blood were both negative. There was some interference with sleep. The pains complained of were not altogether constant, but unfitted her for her usual duties during the succeeding twelve weeks, after which time she thought herself well again.

December 1st, at the request of her husband, and upon the urgent advice of her former physician, whom she consulted while on a visit in November, I saw her again. At this time she showed me what she had previously concealed, a large, indurated tumor of the right breast, that had been steadily growing for two years. There was no pain in the breast and there had been none at any time, a circumstance which together with her feelings of good health, had caused her to disregard the growing tumor. The swelling was greatest in the upper right quadrant, but involved practically the whole gland. The nipple was markedly retracted, and the overlying skin was adherent and distinctly reddened. On palpation it was evident that the axillary glands were involved. Two days later I removed the entire breast, a large area of skin, fat, both pectoral muscles and several enlarged glands in the right axilla. The pathological report was as follows: Specimen shows epithelial cells in a stroma of fibrous tissue. Many areas are undergoing necrosis. Diagnosis: Carcinoma.

The patient did well immediately succeeding the operation, and left the hospital at the end of two weeks. The operation wound healed perfectly and was to all appearances normal during the four months that it remained under my observation.

On returning home the patient was able to get about the house, up and down stairs, and assist in her duties. Within a fortnight, however, she began to have a recurrence of the pains complained of the fall before, sleepless nights, numbness in the feet and legs and, a little later, severe pains or cramps in her legs, especially at night. Her knees became unsteady, and it was difficult for her to walk. Within two months after the operation the paralytic symptoms of myelitis had well developed, not only in the legs but also in the bladder and rectum. Girdle pain was

*Read before the Section on Surgery, Ophthalmology and Otology at the Annual Meeting of the Michigan State Medical Society at Grand Rapids, May 25, 1904, and approved for publication by the Committee on Publication and the Council.

present. There was incontinence of urine, and on passing the catheter retention was also found to be present. Sensation was abolished in the feet and legs excepting that the legs would draw up involuntarily and unconsciously when touched, and at such times patient would complain of pains in the back and shoulders. Under massage and hydrotherapy the patient's appetite continued good, pains became less severe and sleep possible. It is not improbable, however, that the cessation of the pains was due to the progress of the disease. Nausea developed early in April, and the appetite began to fail. At about the middle of April the patient was removed to another state, where she died May 2d. The husband wrote: "It seems very plain to me now that the end came because of the continued creeping upward of the paralysis, affecting her stomach, causing the terrible sickness, and finally her lungs, causing a complete stoppage of her breathing. It particularly affected her lungs for three days, though not to cause her much suffering till the last ten minutes."

Such, in brief, is the history of a case of mammary cancer, developing for two years and complicated with what has been assumed to be compression myelitis by metastasis. On account of the removal of the patient, an autopsy was not possible, but it seems fair to suppose that the spinal disorder was secondary and that the pathologic findings would tally with those in similar cases.

In a case recently reported by Pearce and Buckley* compression myelitis, complicated a carcinoma of the breast of three years' growth in a woman of seventy years. The autopsy record reads in part as follows: "On section of vertebral column and removal of cord there was found in middorsal region a small portion of cord about 0.5 centimeter in length, which was softened in appearance and to the touch. Above and below this portion of the cord for some distance there were strong adhesions; also the vertebræ in this region—four or six in number were softened in their bodies—a probe being thrust into them, showing distinct evidence of disease of the bones." Dr. Buckley states: "On gross examination there is to be seen on the anterior surface of the dura a mass of neoplasm about 5 mm. in thickness, extending from the tenth to the twelfth dorsal segments. The dura itself is considerably thickened. There can be seen clearly defined an ascending degeneration, limited to the postero-median columns, throughout the cervical region, and in the dorsal region as far as the eighth segment. At this level the lesion extends laterally, involving the postero-external columns, from which the gray substance cannot be differentiated with the aided eye. In the lower part of the tenth and the upper part of the eleventh dorsal segments there is an apparent diffuse myelitis. Below this there are distinct lateral lesions (descending denegeration)." He remarks that the epitheliod cells of the dural mass correspond to the elements of the breast growth.

†Hirt has quoted a report by Gowers and Hurley of an oval myxoma pressing upon the cord and producing compression myelitis. He also refers to a case by Bruce and Mott, who, diagnosticated *intra vitam* a tumor which, originating in the fifth left dorsal nerve, pressed upon the middle of the dorsal part of the spinal cord; the patient

The Journal of the American Medical Association, Vol XLII., No. 5, p. 296.

†Text Book of Nervous Diseases.

presented the symptoms of compression myelitis and died. At the autopsy, softening with ascending and descending degeneration was found.

These cases suggest practical questions concerning the dissemination of carcinomatous disease, the early diagnosis of compression myelitis due to metastatic growths, and the treatment of the complication.

Carcinoma is known to spread in three ways, viz.: by local dissemination; that is, by the formation of discontinuous tubers, as well as by infiltration of tissues, by lymph-gland dissemination, and by general dissemination to parts of the body remote from the primary disease.

There is a strong tendency to local dissemination of mammary cancer. It spreads to the skin, the fatty tissue, the pectoral and intercostal muscles, the ribs, sternum, clavicle, pleura, lungs, pericardium, and the opposite breast. The appearance of the growth in these tissues has an important bearing upon the operative treatment of the disease, on account of the greater liability to both lymph-gland and general dissemination from the additional sources of infection.

The development of the disease in the lymphatic glands is really the grafting of cancer from the original growth. The frequency of gland dissemination and the rapidity of it vary greatly. In some instances the glands are involved almost as soon as the disease appears. In other cases years may intervene. General dissemination may occur without gland dissemination, but as a rule it may be said that the progress of the disease will depend in a measure upon the rapidity of gland invasion.

There is no rule or exact knowledge as to the period of general dissemination of carcinoma, but the universal opinion is that this takes place late in the disease, fifteen months after gland invasion or two to three years after the first appearance of the disease. Williams‡ quotes Gross: "Out of 100 metastases, 24 form within the first year, 3 in from 13 to 18 months, 18 in from 19 to 24 months, 27 in from 25 to 36 months, and 28 after 3 years. The liver has been found to be most frequently affected with metastases in mammary cancer. However, all other organs and tissues are subject to this process. The bones, especially the cranial bones and vertebræ are often invaded." Williams states that "metastases in the vertebræ almost invariably originate in the bodies; usually several adjacent bones are affected, and in most cases the disease is situated in the lower dorsal or upper lumbar regions." He also remarks that "dissemination in the osseous system occurs much more frequently in connection with cancer of the breast than with cancer of any other part of the body."

The same writer believes in the "embolic theory" of systemic dissemination. "This implies," he says, "that the germs whence metastases arise are proliferous cells, detached from the primary neoplasm or its derivatives, and carried off by the blood stream. These, by their continuous proliferation, directly originate the secondary growths; so that the first cancer is the parent of all that form after it." This opinion harmonizes with many observations, but it is after all only a theory. So also is that concerning the location of metastases.

Concerning the diagnosis of compression myelitis due to metastatic growths

‡Williams' "Twentieth Century Practice of Medicine," Vol. XVII.

Hirt puts it very satisfactory. "If a patient complains of persistent pains and stiffness in his back, if at the same time there are found sensory disturbances in the form of paræsthesias, circumscribed areas of anæsthesia, and motor disturbances in the form of slowly but steadily progressing paralysis of one or more extremities, the suspicion that a tumor of the meninges or of the cord itself exists is justifiable. The likelihood is greater if other spinal affections can be excluded, and if occasional remissions in the progress of the disease can be noted. Pearce and Buckley considered, in the case they reported, that "pain of root irritation of girdle type was the most prominent spinal symptom from the first and was persistent." Pain was a prominent symptom in the case I related, but it was not of the girdle type. There was also an apparent remission of the disease in November and December as might be the case according to Hirt, but it reappeared soon after the operation, and it would be of interest to know whether the disease were hastened by the operative procedure.

The treatment of compression myelitis due to metastases must be surgical to be of any use, but our diagnostic marks are as yet hardly accurate enough to warrant extensive interference. This was considered in the case related, but the prospect seemed too hopeless to make the attempt. In the case of Gowers and Hurley referred to above the tumor—a myxoma—was excised after removal of the spinous processes of the third, fourth and fifth dorsal vertebræ, and the patient recovered completely. Bruce and Mott are said to have regretted not having decided upon an extirpation of the tumor in the case diagnosed by them.

With our present knowledge of carcinoma and its spread, the only rational treatment, as it seems to me, is the early and thorough removal of all suspicious tumors, being willing rather to err on the side of innocent than malignant disease.

A CASE OF RECURRENT VOMITING.*

COLLINS H. JOHNSTON,
Grand Rapids.

Cases of recurrent vomiting in children are unusual, so that it seemed to me proper to put the following case on record:

O. H., born May 30, 1897. His general health has usually been good, though he has always had more or less trouble with his digestive organs, consisting principally of coated tongue and constipation in spite of most careful regulation of his diet, habits, etc. He has also frequently been troubled with nocturnal incontinence of urine since infancy. This has often been relieved by nerve tonics and atropia, only to return when his general health has become impaired from any cause. At such times he has also had attacks of what S. Weir Mitchell calls "habit chorea," consisting of spasmodic involuntary contractions of certain muscles of the face, giving rise to blinking, raising the eyebrows, or twitching of the mouth, which are always made worse by observation. These

*Read before the Section on General Medicine at the Annual Meeting of the Michigan State Medical Society at Grand Rapids, May 26, 1904, and approved for publication by the Committee on Publication of the Council.

attacks are attended with more or less mental irritability and disturbance of articulation, and the irregular muscular movements have several times shown such a tendency to become general, that I have at times feared the onset of genuine St. Vitus' dance. The limitation of the spasmodic movements and the short duration of the attacks have made the differentiation not difficult.

For several years he has been subject to acute attacks of nasopharyngeal catarrh, with temporary swelling of the pharyngeal tonsil and impairment of hearing. These acute head colds finally give rise to such a degree of hypertrophy of the lympothid tissue in the upper pharynx that while nasal obstruction was never complete, except during acute exacervations, obstructive symptoms, such as inability to blow the nose, mouth breathing and nasal voice were frequently present.

You will have seen by this time that the boy has very decided neurotic tendencies.

Since infancy he has had occasional attacks of vomiting, lasting but a short time, and which formerly were supposed to be due to indigestion. Three years ago he had two such attacks about three months apart, lasting two or three days, and a year later, another lasting three or four days. The vomiting was but little if any relieved by treatment. The matter ejected usually consisted at first of undigested food, with no especial evidence of abnormal fermentation, and later of mucus, sometimes stained with bile. Pain, or rather, distress in the gastric region was sometimes complained of, but was not a prominent symptom. Fever was also an insignificant factor, and when present would not last longer than a day or so.

In June, 1902, he contracted whooping cough, which ran a more protracted course than usual and was attended with a good deal of vomiting. His general health did not suffer very materially, but the amount of nasal obstruction was so much greater than before that I advised the removal of his adenoids, which was done in December of that year.

In February, 1903, had a severe attack of influenza. The gastro interic symptoms were especially severe, and the abdominal tenderness excessive; tympanites, severe vomiting, and high temperature for six or eight days were strongly suggestive of peritonitis or typhoid fever. The case was also complicated with catarrhal inflammation of the upper respiratory tract, suppurative otitis media, and inflammation of the lymph nodes situated below the ears and behind the angles of the jaws. He was greatly prostrated by this illness, and was taken to Florida as soon as the acute symptoms subsided, where he remained two months. He did not recuperate as rapidly as was hoped for, and had not quite regained his usual health on his return. He went through the summer, however, pretty well.

In September, 1903, he had an attack of vomiting, lasting three or four days, which differed from any of its predecessors in that it was accompanied with an acute infection of the nose, throat, and glands of the neck, and considerable fever. The swelling of the parotids was so great as to give rise to the appearance of mumps. The adenitis was slow in disappearing and convalescence was more protracted than usual. A month later he had another attack of vomiting of the usual kind, lasting three or four days, but with more than the usual amount of fever.

In December, 1903, occurred an attack of vomiting which nearly terminated the little fellow's life. He seemed to be in his usual health until December 12th, when he had a slight cold in the head, which, by the way, had preceded most if not all of his attacks. The illness did not appear to be in any way connected with his diet, and was unattended by any evidence of indigestion. His nose was obstructed and he snored some that night. The next day he was about the house, but was pale and listless, had no appetite, and, as usual, was constipated. No fever was present. That night he was somewhat nauseated. Next day, the 14th, he was kept in bed and all food and drink withdrawn; he vomited once, for the first time, during the night. The next day he felt so much better that a small amount of milk toast was given in the afternoon. A few hours later he began to vomit, and for ten days nausea and vomiting was almost continuous. Everything which went into the stomach was promptly ejected, and efforts at vomiting were frequently made, though nothing had been taken. The vomitus consisted of mucus, or a watery fluid, sometimes tinged with bile. I tried various combinations of subnitrate of bismuth, oxalate of cerium, cocain, hydrocyanic acid, etc., but without the slightest benefit. After withholding food altogether for two or three days, I gave him small amounts of egg water and beef peptonoids, but nothing was retained. Thirst was excessive throughout. The highest temperature reached at any time was 100 4/5 degrees, which occurred but once, the usual temperature being 99 to 100 degrees per rectum. Abdominal distress was occasionally complained of, especially after severe vomiting, and to relieve this, as well as the extreme restlessness, on two or three occasions small doses of morphia were given. It seemed to me that the nausea and vomiting were increased thereby. Towards the end of the first week all attempts at administering anything by the mouth were given up, and as he was rapidly losing flesh and strength, rectal enemata of peptonized milk, panopeptone and brandy were given every six or eight hours. Up to this time the abdomen was markedly retracted and the inactivity of the intestinal canal complete. Soon, however, in spite of the fact that antiseptic precautions were observed in giving the nutrient enemata, the abdomen became more or less distended with gas, and on the third day of their administration he had several liquid evacuations. The rectum became so irritable that I was forced to discontinue the chloral and bromide I was giving to promote sleep and allay restlessness.

The patient's condition became exceedingly alarming. The nausea and vomiting were uncontrollable and frequent. The pulse was 140, feeble and occasionally intermittent; the respiration sometimes sighing; restlessness was extreme, and he complained of considerable abdominal distress. His lips were cracked and tongue dry and heavily coated. The vomiting increased until finally the child lay almost helpless on his side, rousing up now and then to beg for water or make a feeble, but often ineffectual, attempt to vomit.

The urinary secretion became very scanty, but at no time did it contain albumen or casts. His extremities were cold, his finger-nails blue, his eyes sunken and half closed, his skin dry and cynatoic and emaciation was extreme.

During the morning of the 22d, he vomited eight times, besides having innumerable spells of retching, and at two

o'clock in the afternoon I gave him a hypodermic injection of morphia grain 1/12 atropia grain 1/450 and strychnia 1/90. He vomited but twice that afternoon, his pulse became slower and stronger, his abdominal distress less, and he rested better than at any time since the beginning of his illness. The hypodermic was repeated at 11 P. M. and at 3:30 A. M. of the 23d. I noticed that as the effect of the morphia wore off his nausea inclined to return, so I decided to keep him in a state of semi-narcotization.

The beneficial effect in this treatment was instantly very apparent. On the 23d he vomited but three times, and on the 24th but twice. During the night of the 24th, he became slightly delirious. His pulse ran up to 160 and became so weak that I increased strychnia to 1/60 of a grain every three hours and gave him three ounces of salt solution subcutaneously, with most beneficial results. He vomited for the last time at 5:30 A. M. of the 24th, and as the bowel had become so irritable that it was impossible to continue rectal alimentation, I was forced to test the stomach sooner than I wished to. At noon he was given two drachms of vichy water, which was retained. This was repeated several times that day, and the next day albumen water, one drachm every hour, was given.

The morphia was now discontinued, but strychnia was kept up for several days in doses of 1/90 to 1/60 of a grain hypodermically every three or four hours, depending on the condition of the pulse and respiration. Convalescence was slow, but uninterrupted. Beef juice was added to his dietary on the third day, egg lemonade on the fourth, junket and chicken broth on the fifth. At the end of a week he was taking milk, milk toast and custard. His bowels were moved each day until the 30th, when small doses of effervescing citrate of magnesia were used. With these his tongue, which was very badly coated throughout the attack, was rapidly cleaned. His strength returned very slowly, he began to sit up a little on January ——, and was able to be removed to Florida on January ——. He continued to improve in flesh and strength, but had not quite regained his usual health when on April 11th he ate some highly seasoned soup at 2 o'clock P. M. and exercised a good deal during the afternoon in the hot sun, becoming quite fatigued. About 10:30 he vomited undigested food and again at 2:30 A. M. During the next day he received nothing but water, and did not vomit again until 4 P. M. From then until 7 P. M. he vomited six or eight times. He passed a good night, but awoke early and began vomiting again at 6 o'clock. Dr. Louis, of ————, began the administration of morphia hypodermically the morning of the 13th. He vomited for the last time on the 16th. The highest temperature during this attack was 99 3/5 per rectum, highest pulse 112. Water per mouth was given several times on the 17th, and egg water the following day. Convalescence was interrupted. He sat up for the first time on the 23d and started for home on the ——.

The diagnosis of recurrent vomiting in its early stages may be most difficult, as it has many points in common with sub-acute gastric catarrh and tubercular meningitis. In sub-acute gastritis there is loss of appetite, nausea, little or no fever, vomiting at first of food, showing more or less evidence of abnormal fermentation, and later of mucus, and more or less abdominal discomfort. The bowels are usually constipated. But the great thirst in

recurrent vomiting, the intense prostration, the severity of the vomiting, the almost entire absence of epigastric pain, and the shorter duration of the symptoms, with perhaps a history of several former attacks, will serve to differentiate the disease from gastritis. At times recurrent vomiting bears a striking resemblance to tubercular meningitis, and only the course of the disease may show that the latter is not present.

The intense thirst which is so striking a symptom of vomiting is not found in tubercular meningitis. In the former the mind is clear, though the child may be dull and apathetic on account of intense prostration, but he is entirely conscious, in marked contrast to the increasing apathy and tendency to stupor in meningitis.

The onset of the latter disease is also more gradual and the vomiting is not so frequent or protracted.

I do not believe it is due to indigestion, or cold; nor are the attacks prevented by treatment directed to the digestive organs.

TREATMENT.

Preliminary catharsis I believe to be of some benefit, but in two or three of my patients' attacks relief of constipation seemed to have but little effect in terminating the illness. If the vomiting has begun, all food, drink, and medication by the mouth should be prohibited.

Thirst may be somewhat relieved by the administration of salt solution per rectum, and nutrient enemata may be used if the attack is prolonged. The hypodermic administration of salt solution is of great use in stimulating the heart and circulation and promoting elimination through the kidneys. As soon as possible the child should be brought under the influence of large doses of chloral and bromide, administered per rectum, or of morphia given hypodermically. Strychnia may be added when necessary.

The symptoms of collapse with cyanosis in my case were quickly relieved by strychnia and hypodermochysis. Between attacks treatment should be directed to the child's nervous system, and every attempt be made to improve general nutrition.

DISCUSSION.

G. F. Butler, Chicago, Ill.: I was interested in Dr. Johnston's paper inasmuch as it reminds me of a case of persistent vomiting I had. I was reminded of this particular case because of the nasal pharyngeal trouble with which the child was suffering. The last case that I had of persistent vomiting was, I think, hysterical. There is a close relationship between nose and pharyngeal troubles and hysteria. Cocainization of the mucous membrane of the nose relieved the vomiting. In this case of Dr. Johnston, there has been trouble throughout with the nose. I would like to ask the doctor if anything was done in that direction towards relieving the vomiting. It occurs to me that there is something beyond mere gastric trouble; it is undoubtedly of a nervous origin.

B. R. Shurly, Deroit: As I understand it this case comes under the head of cyclic vomiting. In the last ten years I think there have been only two of those cases in Detroit that I happened to hear of; both of them were fatal. It is exceedingly rare and interesting in children.

There are four prominent points which seem to appear in all three of these cases. First, they occur in families well to do. Second, there is a marked neurotic type in the family history. Third, there is the presence of adenoids with a marked enlargement of the lymphatic glands, and fourth, attending that which is so frequent in conditions where we have a denoid involvement we have a neurosis. It seems to me these four types of conditions go hand in hand and are very important in the consideration of the etiology of this condition. The two cases we have had in Detroit were fatal under the most careful treatment. The fact that this case responded to morphine shows evidently a marked neurotic element in it, and the fact that there was nerve irritation.

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Editorial

TREATMENT OF ACUTE LOBAR PNEUMONIA.

To the practitioner of medicine, pneumonia is of the greatest interest because of its frequency, fatality and lack of a specific in its treatment. There appears to be a great variety of methods in vogue in treating acute lobar pneumonia. Beverly Robinson,* of New York City, gives his views as to the treatment in a recent medical publication, the main points of which are given below.

With the beginning of the disease (chill, fever, pain in side, cough and expectoration), he advocates strongly the use of beechwood creosote, vaporized more or less continually in the patient's room. It acts as a moderate antiseptic locally, as an anti-catarrhal agent for the bronchial mucous membrane and to a certain degree it prevents contagion by the nurses in attendance. It should not be used in nephritic cases and its use should be stopped when the patient's kidneys show signs of becoming disordered.

Whether it is advisable to use opium or morphine in lobar pneumonia is a question discussed quite generally by the profession. Doctor Robinson finds no objection to the moderate use of morphine hypodermically in the beginning of the disease to allay the pain in the side if it is intense. If moderate, local applications are better. Later in the disease no morphine as a rule should be given as it tends to lock up the secretions which are already too much interfered with by the disease itself.

Large doses of digitalis at any period of the disease are prejudicial to the patient. In the milder forms of the disease, they are not indicated. In the graver forms and in middle adult life, arterial changes counterindicate its use, not to speak of possibly granular degeneration of cardiac muscular fibre. Minute continous doses of digitalis, given before there are any symptoms of heart failure may prove useful in warding it off. When heart failure shows itself it should not be discontinued but protected as to its action upon peripheral arteries, with a moderate amount of nitroglycerin (1-200 or 1-100 grain every two or three hours). So soon as there is evidence of pronounced cardiac weakness, good digitalin and strychnine should be given hypodermically. In regard to strychnine, while the doctor values it highly in the treatment of pneumonia, he feels its use has often been pushed to an extreme degree, causing the insomnia and delirium to become aggravated.

Coca given by mouth or hypodermically has been of great service in cases where hope had almost been given up. The reason that this agent does not more frequently respond to our wishes is because the preparation employed is relatively inert. It is wise to give black coffee frequently by mouth or rectum in advanced cases of pneumonia whenever coca is unreliable.

In many instances, oxygen, which has been given frequently from the time pneumonia shows marked gravity, has proven

*_The American Journal of the Medical Sciences_, December, 1904.

extremely beneficial. To be of real value, it must be given freely and not begun when the patient is almost moribund.

Except in the beginning of a pneumonia and in specially rugged or full-blooded patients, venesection as a rule is not desirable. However, in the first two or three days of the attack of acute lobar pneumonia where general œdema of the relatively healthy lung occurs, life can be saved by a prompt and sufficient venesection (eight to twelve ounces). Later in the disease it is not beneficial except when the right heart is distended and unable to cope with its fluid contents, despite all judicious cardiac stimulation and except when the patient is suffering unquestionably and mainly from profound general toxæmia.

Acute lobar pneumonia is one disease at least in which the use of alcohol is almost imperative at times if we wish to tide the patient over an imminent crisis. The frequency and amounts given at such times are governed almost solely by the urgency of the case and the apparent benefit derived.

Cold bath, cold pack or cold applications locally, the doctor does not believe in but prefers the use of tepid or warm water for bathing purposes to which a moderate proportion of alcohol has been added, believing the nervous shock caused by the toxin is better allayed with moderate heat than with cold. He does not believe in the cold tar products as antipyretics. The bowels should be kept open.

In the treatment of no disease are frequently repeated visits from the physician, supported from the beginning with good nursing, more important than in that of pneumonia. Attention to these will be the means of saving many lives which otherwise would surely be lost.

MEDICAL ORGANIZATION.

William B. Ulrich,* President of Medical Society of the State of Pennsylvania, very nicely states some of the advantages of medical organization to the physician and to the general public:

1. *Increased Harmony and Mutual Regard Among Medical Practitioners.*—Our honored ex-secretary, William B. Atkinson, in his sketch of the "History of the Medical Society of the State of Pennsylvania," in commenting upon the state of the profession before this society was organized, observed that, even as late as 1850, there was a great objection on the part of many of the more prominent physicians to hold allegiance to any form of medical organization; especially was this the case in the large cities and towns. Living in the light of the valuable results obtained from many societies of the present day, he says it is difficult to realize the heart-burnings and jealousies then prevailing. One of the beneficient results of the Civil War was that the constant association of physicians in the army, in camp, and in hospital, led, after their return to their homes, to a more fraternal feeling. This gave an impetus to the formation of medical organizations with both social and scientific features, which they have never lost, and which has culminated in a united medical association, bringing physicians, in all parts of this country, into fraternal relationship with each other. The contrast between the present state of affairs, when the leaders of professional thought are among the most faithful in their attendance at our meetings, and that of which Dr. Atkinson wrote, is very great indeed. It is

*American Medicine, October 29, 1904.

attributable in my mind solely to the influence of medical organization upon the profession.

2. *Advancement of Medical Practice and Mutual Improvement.*—I think that it will be admitted without argument that discussion on medical subjects and the preparation and reading of papers have a decided educational influence. The meetings of the district and county medical societies, particularly, afford a sort of post-graduate course of medical study, of which every physician should avail himself; it is an aid in keeping up with the progress of medicine, which no one can afford to ignore, if he wishes to retain his standing in the profession.

3. *Elevation of the Standards of Medical Education.*—The records of this society show the zeal and the faithfulness with which this great object has been pursued. It has persistently insisted upon certain educational qualifications for students, to be determined by an examination prior to matriculation, until such are now required by all of our medical colleges. It has advocated more thorough teaching, and our colleges have lengthened their course from four months to seven, and from two terms' attendance to four, with the prospect held out for an additional year. Furthermore, chiefly through the influence and labors of this society, a State Board of Medical Examiners has been created in order to ascertain the fitness of recent medical graduates to be licensed to practise medicine. The results of these reforms are now evident to all the world. Medical matriculants are more highly educated, and the qualifications of those graduating from the colleges are much higher. Socially, a marked change has been observed in the character of the graduates, even within the last few years.

4. *Increased Influence of Physicians in the Community.*—The opportunity that organizations offer for the united profession to be heard on great questions of sanitation and to influence public opinion is so obvious that no argument is needed on this subject.

5. *Improvement in Medical Literature.*—I need only point to the transactions of the American Medical Association to demonstrate that by medical organization we have succeeded in creating a weekly medical periodical which is larger in size and better in quality than any of its competitors throughout the world, not even excepting its older contemporary the *Journal of the British Medical Association,* which we mention with the highest respect and with regard bred of long and valued acquaintance.

The foregoing are a few of the advantages that have accrued to the medical profession; let us inquire if any advantages have resulted to the public from medical organization:

1. The public health has been greatly advanced by medical organizations, through the securing of medical legislation, as already mentioned, establishing Boards of Health, Medical Examining Boards, health instruction in schools, etc.

2. The advancement of medical science by medical organization has led to the more intelligent and scientific control of disease and the successful treatment of conditions that were formerly beyond the ability of the profession to relieve. The present successful treatment of pulmonary tuberculosis at White Haven, Pa., is a striking example of the truth of my statement. The exemption of Cuban cities

from yellow fever while under American control, is another convincing fact.

3. The protection of the sick, in a large degree at least, from the sad effects of ignorant and unskilled treatment, has been one of the objects attained by medical organization. Through the efforts of medical societies, nearly all of our states and territories have passed laws which forbid persons to offer their services as physicians unless they have duly obtained a license to practice medicine, after the regular college course of study. This has resulted in direct sanitary and pecuniary benefit to the community.

4. Dissemination of medical and physiologic information, by medical organizations, among the people at large, has been of immense service in the past, and is capable of rendering even greater service. Not only has this influence been manifested in obtaining legislation for higher standards of medical education, and for the protection of the public health, but it has also been repeatedly shown in advocating and accomplishing improvements in the water-supply, the supervision of dairies, the prevention of adulteration of food and drugs, and in many other ways. In the presence of threatened epidemics it has taught the public the lessons of sanitation, and also how to keep the babies well during the heated term; has urged the performance of vaccination upon the public and, in the effort to stamp out smallpox, even consenting to the free performance of vaccination in our large cities, to all persons applying for it. Through the influence of medical organizations, laboratories belonging to the department of public health have been established, where blood-examinations in cases of suspected typhoid fever are now made, and cultures from supposed diphtheria cases are tested, entirely without charge. Diphtheria antitoxin is also gratuitously supplied and physicians sent to administer it, when requested in our large cities. Certainly, the organized medical profession has most potently and unselfishly made its influence felt in creating a proper sentiment in matters relating to the public health, and the prevention of disease. Through its efforts and co-operation, Boards of Health have been constituted and are now engaged in protecting the people from committing sanitary sins, in preventing epidemics, and in collecting and recording vital statistics. The benefits from such work cannot be estimated, but they are evident to all.

It occurs to me that if our medical societies were occasionally to arrange for open or public meetings, such as the health conferences which have been held under the auspices of our State Board of Health, it would not only instruct and interest the public in very important questions, but it might lead to better understanding and more hearty co-operation with the profession in matters affecting the general health. It was my privilege recently to attend an open meeting of the Bucks County Medical Society—the majority of the audience being ladies, many of them mothers. Dr. John B. Roberts, of Philadelphia, delivered an extempore lecture on tuberculosis, in such language as made it thoroughly comprehensive to the lay mind; forcibly setting forth the danger of neglecting physical laws, laws just as divine in their origin as those which govern our divine nature and the observance of which should be just as sacred. The profit of such meetings cannot be questioned. I would urge that every county society hold similar meetings, three or four times each year. Medical knowledge thus dissimin-

ated would be immeasurably beneficial to the public and creditable to our profession. There is a great deal of latent talent in our local societies which would be brought forth with great profit to the individual as well as to the public in meetings of this kind.

5. The public is greatly benefited by medical organizations in a very direct and personal way, by the fact that the physicians, who regularly attend such medical societies, are not only *ipse-facto,* of good standing in the profession, but are well posted. By their work in reading papers and discussing cases they are incited to take greater interest in their patients, and are required to keep up their medical studies. I have already shown that the individual physician derives great advantage from such association with his brother physicians, and is made a better doctor thereby; I now claim that it is a fair deduction, that being a better physician his patients must necessarily derive a reflected advantage from the medical organizations, of which he forms an integral part.

FEWER MEDICAL STUDENTS.

Twenty years ago New York City had one thousand nine hundred and seventy-nine students; the last report of the Commissioner of Education gives it eighteen hundred. Twenty years ago Albany, Buffalo and Syracuse had one hundred and six medical students; the last report gave then five hundred and seventy-four.

From the standpoint of the profession New York City is to be commended above the outside cities of New York. The great need of the profession is fewer medical students—fewer additions to its ranks. Whatever causes operate toward this end are to be encouraged; whatever against it, discouraged.

It is reported that the recent entrance examinations have reduced the number of students entering the Michigan Medical Colleges, but we have no exact data. We hope for the bearing it has upon the entire Michigan profession, this reduction may be large and increase each year till the normal proportion of doctors and patients is reached.

It is a sad sight that presents when doctors, engage in abortion, are unable to meet their obligations, resort to all sorts of makeshifts, as under bidding, buying business as insurance examiners, as surgeons, ophthalmologists, selling business as general practitioner to groups of specialists, violating trusts committed to them.

It is worse when the facts show that too many doctors occupy a given area, to render possible a fair living income to all. Some time ago while visiting a beautiful interior town, the leading physician of that place said that his income was distressingly meagre; I then quoted him the fact that a predecessor in the same field had accumulated a fine fortune for the place. He replied that now there were practically no fevers, or other epidemic diseases and so the actual amount of medical service called for was greatly diminished. This is only one source of reduced income, but it covers the entire rural districts. The needs of twenty-five years ago are less than now. Clubs, accident insurance companies, fraternal orders, hospitals, dispensaries, are other agents as the general increase of practical sanitation, has restricted the field of medical practice to a degree little realized. It is but rational that the supply of doctors be also restricted. We have

an increase of the entrance examination, as well as a stiffer examination to secure a state license to practice. The common sense application of these with a gradual increase in their severity, should in time bring about an equilibrium of doctors to patients.

DEATH OF JOSEPH HUME TAYLOR.

Joseph Hume Taylor was born at Almont, Michigan, April 13, 1853. He graduated from the Almont High School and the medical department of the University of Michigan in 1876. After graduating from the latter institution he located in Lapeer. In 1883 he removed to Columbia, North Dakota. In 1890 Dr. Taylor moved back again to Lapeer. In 1884 he was married to Miss V. Rood of Lapeer. During the past four years the doctor has been in poor health and died November 24, 1904, of general tuberculosis, aged 53 years. He leaves a wife and three boys. Doctor Taylor was a member of the Lapeer County Medical Society, the Michigan State Medical Society and the Northeastern Medical Society.

H. E. RANDALL.

THE DEATH OF ADALIN GASSER.

The grim visaged reaper of life has cut a wide swath in the ranks of our profession and particularly in the Houghton County Medical Society during the past two years. We, of the medical profession, are oft times so taken up with the various duties which devolve upon us that we fail to justly appreciate the true significance of existence.

"The boast of heraldry, the pomp of power,
And all that beauty, all that wealth e'er gave
Await, alike, the inevitable hour;
The paths of glory lead but to the grave."

It is not until we are called upon to stand by the open grave of some very dear friend, or brother practitioner, that we stop for the moment to ask ourselves, who are we, where are we, and what is our destiny? We are so busied with the unraveling of protoplastic and cellular life—with our endeavors to solve and rectify the manifold pathological processes of human existence, that we fail to see in the dissolution we call death anything more than the cessation of that phenomenon we call life.

We are like bubbles upon the crested wave of the great ocean, occupying the highest place of all animated beings but for the moment, then again sinking back into the darkness of forgetfulness. Ages upon ages, cycle upon cycle, has the process with never ceasing regularity been manifesting itself.

From out the bereaved heart of humanity to-day goes the same cry of inquiry as went out centuries ago, "If a man dies shall he live again?" And now as then, philosophy and unaided reason gives us back again but the echo of that despairing cry. And yet, hope forever springs in the human heart. We have been following our dead for countless ages to the verge, as it were, of a vast ocean, upon which the darkness and blackness of night seem to have descended. The great heart of humanity calls in its sorrow and bereavement across the broad expanse of this lightness night, and listens for the whisperings of assurance and certainty only to be conscious of the beatings of its

own heart, and to hear the sound of nothingness. And yet though

"Blindfolded and alone we stand,
With unknown thresholds on each hand;
The darkness deepens as we grope,
Afraid to fear, afraid to hope:

Yet this one thing we learn to know
Each day more surely as we go,
That doors are opened, ways are made,
Burdens are lifted, or are laid,
By some great law, unseen and still,
Unfathomed purpose to fulfill,
Not as I will."

And to humanity this Great Law has come to be looked upon and looked up to as Israel's Jehovah and Christianity's loving Father.

One month ago to-night there met with us one apparently in the full measure of health and strength. Among the happiest none was happier than he. He took part in the questions that were of great interest to this society in a manner that was at once humorous and well put,—for none enjoyed our meetings more than he. To-night he is numbered among the clods of the valley, for on the evening of October 10th the finger of death touched his lips and he slept. Dr. A. Gasser came to Houghton County from Milwaukee about fourteen years ago. He at once won the hearts of those who were brought in close contact with him. His kindly disposition to all brother practitioners, his high ethical ideas have continued unabated during those years.

Dr. Gasser was ill just four days and confined to his home but three. On the day of his death he seemed some better, but toward the beginning of evening he was seized with a fit of vomiting, during which death came to him.

Adalin Gasser was born in Switzerland in 1859 and was, therefore, at the time of his death forty-five years of age. His father was a large leather merchant in his native country and had amassed quite a fortune. The doctor received the rudiments of his education in his native town, spending about seven years in the Latin School of Solothum, ordinarily termed the gymnasium. Selecting the profession of medicine for his future life work, he entered the University of Berne in 1881. The second year of his professional study was spent in the University of Strassburg. He next returned to his own University of Berne. The following summer he entered the University of Munich, where he spent three years. He then spent one year at the famous University of Heidelberg, graduating the following year from the University of Erlanger. Among his instructors may be mentioned Prof. Strümpell in internal medicine; Prof. Von Winkle in gynecology and obstetrics, and Prof. Von Bergmann in surgery. Such a trio could not but make a powerful and lasting impression upon the young man's life; and to those of us who knew him intimately, the influence of their teaching was ever manifest. They gave the young student high ideals and lofty conceptions of the physician and his work. To him every practitioner should be a colleague, and were he not, then that alone was sufficient to take him from the ranks of a learned profession and ever afterward be looked upon as one beneath, and in no true sense related to the noble profession of the healing art. To his mind none but high-minded gentlemen should ever enter upon the study of medicine. To him the true physician was and must ever be above the mere commercial aspect of his calling; he must be a leader in thought and action,

and a dominating factor in the world's progress. Nor was this at all strange when we consider that Switzerland, with its centuries of liberty and freedom, was his birthplace and the training ground of his young manhood. It was this that made him love the country of his adoption with such tenacity of purpose and will. He believed in freedom for all mankind. Liberty was to him no mere idle word, but rather one teaming with life and throbbing with the impulse of purpose and activity. He believed heartily and with all his soul that,

"New occasions teach new duties;
Time makes ancient good uncouth;
They must upward still and onward
Who would keep abreast of Truth.
Lo! before us gleam her camp-fires!
We ourselves must Pilgrims be.

Launch our Mayflower, and steer boldly
Through the desperate wintry sea,
Nor attempt the Future's portal
With the Past's blood-rusted key."

When President McKinley called for 100,000 volunteers in our war with Spain, brought on largely by the inhuman treatment of Cuba, Dr. Gasser telegraphed Gen. Alger offering his services to the United States in his professional capacity, whenever and wherever the Secretary of War should direct. Blood will assert itself, and this Swiss-American, this American from the land of William Tell, rose to strike a blow for liberty and freedom in the cause of bleeding Cuba. True to the traditions of his country he believed in the ultimate triumph of right and justice.

"Truth forever on the scaffold,
Wrong forever on the throne;
Yet that scaffold sways the future,
And behind the dim unknown
Standeth God, within the shadow,
Keeping watch above his own."

At heart, he was one of the most American Americans I have ever known. He believed in our past, he took an active part in our present, and had a firm belief in our future. America to him was destined to be in all the coming years of the world's history, a potent factor for good, teaching the rights and equality of man before the law. America was to be the sturdy young giant who would strike down, and to its death, the usurpations and governmental fallacies of Europe. Right to rule meant to him the right to serve.

As a physician he was well educated and prepared for his work. He enjoyed the confidence of a large practice. His heart was ever open to the call of the poor and needy, and many an orphan and widow will long miss the kind ministering hand of a noble nature that among us was known as Dr. Gasser.

"His sun went down while it was yet day."

"But the night shall be filled with music,
And the cares, that infest the day,
Shall fold their tents like the Arabs
And as silently steal away."

He has gone from us; we shall miss him; we have missed him.

"True it is that Death's face seems stern and cold,
When he is sent to summon those we love,
But all God's angels come to us disguised;

"Sorrow and sickness, poverty and death,
One after another lift their frowning masks,
And we behold the seraph's face beneath,
All radiant with the glory and the calm
Of having looked upon the front of God.

"Life is the jailer, Death the angel sent
To draw the unwilling bolts and set us free.
He flings not open the ivory gate of Rest,—
Only the fallen spirt knocks at that—
But to benigner regions beckons us,
To destinies of more rewarded toil.

"'Tis hard at first to see it all aright:
In vain Faith blows her trump to summon back
Her scattered troop: yet through the clouded glass
Of our own bitter tears, we learn to look
Undazzled on the kindness of God's face;
Earth is too dark, and Heaven alone shines through."

And so on Oct. 14th as the setting sun was kissing the hill tops and the beautiful lake at their feet was bathed in the shade of approaching night, we laid our friend and brother to rest. His work was done. His course was run. The rustle of the autumn leaves around us, the day, the hour, the occasion, all reminded us of the brevity of life, and the vastness of eternity. And at twilight, as the stars came out one by one, we thought of him, not as among us, but as somewhere far out in clear blue among those silent watchers of the night.

"The loath gate swings with rusty creak;
Once parting there, we played at pain;
There came a parting, when the weak
And fading lips essayed to speak
Vainly, "Auf Wiedersehen."

Somewhere is comfort, somewhere faith
Though thou in outer dark remain;
One sweet sad voice ennobles death,
And still for eighteen centuries saith
Softly, *"Auf Wiedersehen."*

"If earth another grave must bear,
Yet Heaven hath won a sweeter strain,
And something whispers my despair,
That from an orient chamber there
Floats down, *"Auf Wiederschen."*

EDWARD T. ABRAMS.

THE JOURNAL.

The third volume of this JOURNAL closed with the last issue. It has been the endeavor of the editors during the past year to make THE JOURNAL as well balanced a one as possible. Beginning with the January, 1904, number, we installed the department of the Progress of Medical Science and assigned the various divisions of it to men we felt sure would ensure its success. It has been well received and in the limited space we can give to it, has covered, in a satisfactory way, some of the best work which has appeared in the journals published in this country and abroad.

Until April, 1904, very little, if anything, had been done, in a systematic way, concerning the reviewing of the new medical books. It was an extremely difficult thing to develop the Book Review Department. Its success and progress has been entirely due to the man, under whose direction it has been developed. This department is really of great interest and usefulness to the practitioner if the books are conscientiously reviewed, and this has been the earnest endeavor of this JOURNAL.

During the past year, the editors have tried to place the County Society News in such a shape that it could be brief, yet to the point. We stopped publishing mere programs of meetings and the like, giving our readers only accounts of annual meetings, resolutions introduced and abstracts of papers and discussions. We wish here to acknowledge our thanks to the secretaries of the various county societies who have helped us in this matter. Many of the papers they have abstracted for us. To those secretaries who have, as yet, failed us, we earnestly urge them to aid us during the coming year either by sending us the abstracts of papers read before their county societies or else by giving us the chance to abstract these papers ourselves.

As this JOURNAL is owned and supported by the profession of the state, we

feel that its editorial columns should be open to all members of the State Society who cares to express themselves in these columns over their own signature, and we trust they will avail themselves of the opportunity.

Volume III. contains sixty-four original articles, some of which have been illustrated. The papers for the most part were read either before the state or county societies. The August number contains a symposium on infant feeding which is one of the best short resumés on the subject.

We trust the editors will have the same kindly support during the coming year as has been granted them in the past.

County Society News.

CALHOUN COUNTY.

The Calhoun County Medical Society held its annual meeting and banquet in Battle Creek on the afternoon and evening of December 6, 1904. The attendance of members and their friends was so large as to severely tax the capacity of the City Hall, where the meeting was held.

The officers elected for the coming year are: President, A. J. Abbott, of Albion, succeeding J. C. Brown, of Battle Creek, who by constitutional provision passes to the Board of Directors, where he will serve for five years; Vice-President, E. W. Lamoreaux, of Battle Creek, succeeding A. J. Abbott, the newly elected President; Secretary-Treasurer, C. G. Vary, of Battle Creek, succeeding W. H. Haughey, who has served in that capacity for nine years and had resigned earlier in the session, at the time of making the Secretary's report.

The following new members were received: W. S. Shipp, R. D. Sleight, A. B. Lull, C. S. Gorsline, D. G. Castell, J. W. Gething, A. J. Read, Geo. A. Robertson, Jr.

Victor C. Vaughan, of Ann Arbor, and Fleming Carrow, of Detroit, were guests of honor, Dr. Vaughan giving, during the afternoon session, an exhaustive explanation of some recent investigations in his laboratory, and Dr. Carrow responding happily to a toast at the evening banquet. Other papers were read and received much discussion.

The names of three members who had died during the year were mentioned in appropriate type on the back leaf of the program, and due respect to their work in the society was given by a well-worded report under the head of Necrology, by J. H. Reed, of Battle Creek.

A motion was passed unanimously, concurring in the resolution adopted by the Wayne County Medical Society, protesting against the recent action of the Board of Regents in ordering free treatment to rich and poor alike in the University Clinics. Chair appointed Geo. C. Hafford, of Albion, as representative from Calhoun County Medical Society to meet with the Wayne County Medical Society, in accordance with the above resolution.

It was decided on invitation of R. M. Gubbins that the next meeting of the society be held in Ceresco, after which adjournment was taken to a reception between the hours of six and seven to the society and its friends at the home of Dr. and Mrs. Haughey, 24 Poplar street. More than a hundred participated in this reception, thus passing away the intervening time before the banquet in the evening, which occurred at the Clifton House at 8 p. m., the parlors and dining halls of which were filled to overflowing with a happy throng of doctors and their friends, who enjoyed the occasion to its fullest measure.

W. H. Haughey, Sec'y.

EMMET COUNTY.

At a meeting of the Emmet County Society, held on November 8th, it was moved and supported that the Secretary write the Board of Regents of the University of Michigan to the effect that the members of the Emmet County Medical Society are not in favor of free medical attendance to all classes. And it was also moved and supported that the Secretary be instructed to write the representative and senator of this district that the Emmet County Medical Society favors legislation for the registration of nurses.

G. E. Reycraft, Sec'y.

HOUGHTON COUNTY.

The annual meeting of the Houghton County Medical Society was held September 5, 1904, at Calumet. The following officers were elected:

President, A. B. Simonson, of Calumet; Vice-President, N. S. McDonald, of Hancock; Secretary-Treasurer, W. T. S. Gregg, of Calumet.

W. T. S. GREGG, Sec'y.

INGHAM COUNTY.

At the annual meeting of the Ingham County Medical Society the following officers were elected:

President—J. F. Campbell, Lansing.

Vice-President—J. W. Hagadorn, Lansing.

Secretary-Treasurer—L. Anna Ballard, Lansing.

L. ANNA BALLARD, Sec'y.

JACKSON COUNTY.

Jackson County Medical Society held its fourth annual meeting at Jackson, December 1, 1904. The meeting was called to order by President D. E. Robinson. Theodore A. McGraw, of Detroit, conducted a surgical clinic. The doctor performed two operations, one amputation and an operation in a case of compound dislocation of ulna.

Several cases were demonstrated to the clinic later.

The following officers were elected for 1905:

President—C. H. Lewis, Jackson.

Vice-President—E. N. Palmer, Brooklyn.

Secretary—R. G. Hendrick, Jackson.

Treasurer—F. W. Rogers, Jackson.

Delegate—D. E. Robinson, Jackson.

Alternate—C. D. Munro, Jackson.

After the election Dr. Robinson gave the following address:

Abstract—

Another year of our organization has gone and it is time to take a retrospect, also to look to and provide for the future. I think the year has been marked by harmony and good feeling in the society and that we stand together today with a stronger feeling of unity and determination to support the organization than ever before because of the personal benefit each member derives therefrom in knowledge gained, and the closer friendships formed.

I do not think this increased interest is sporadic in character or to be short lived but rather that it will grow and become stronger among us until our calling, because of our unity and determined efforts, shall come to occupy that place of respect and influence in the community which its high aims and purity of purpose entitle it to attain, and it should be our effort by every means at our command to encourage and hasten this upbuilding and uplifting of the standard of our calling. Any organization is strong only as the units of its composition are strong, and it therefore devolves on every person in the profession to feel that he has an interest and part in the work. We aim to point out some of the mistakes of the past, particularly of the older physicians and warn the younger members against falling into the same errors. We hope also to offer some advice for your consideration and perhaps approval. There are in our city about seventy physicians of all schools. Of course quite a number of these are not in active practice. Probably about fifty-six are giving their time and energies exclusively to professional work of whom fully one-half are practicing some exclusive "pathy" or "ism," or are too unprofessional in their conduct to receive recognition by this society, leading about twenty-eight workers who are striving to uphold scientific rational medicine. So long as the people are seeking after false gods or the follies and superstitions of feudal ages, I suppose that on the principle of demand and supply unscrupulous persons will meet their wants and incidentally relieve them of their hard-earned dollars. These are the parties from whom the public should be protected, and no body of men can do more than an intelligent, persevering and united medical profession to show the true character of these various isms. "By their fruits ye shall know them," is as true now as when first spoken, and all those fads will meet the fate of the historic fig tree. In this work of educating the public we each have something to do; we must strive to make our works so much better and truer that all may see the real aim of those who seek to humbug them by pandering to their superstitions and love of the mysterious.

Fortunate indeed is the man who was early under the tutelage of a thorough and methodical instructor. Method in, as well as method of investigation, is so much more thoroughly taught today in our schools that the young man starts today much better qualified than formerly. No man can ever expect to succeed without system in his work, investigating all that may in any way pertain to the case under consideration and always as nearly as possible following the same order in the investigation. Do not neglect the urine or the heart or lungs or any other organ simply because the patient has not called attention to them, or the symptoms do not indicate trouble there. If we wait until symptoms be-

come so plain as not to be mistaken we will be unfaithful to the trust reposed in us and a valuable life may pay the forfeit. A very common error is to be content when we have found some one organ or system diseased while the malady which is really destroying our patient may be overlooked and allowed to go on until irreparable damage is done, simply because our investigation was not thorough and complete. It may be impossible to determine the true character of the malady at a single examination, and we must not be ashamed to own up to the fact and ask for a second or third investigation if need be. Life's processes are intricate and many of them but poorly understood or not understood at all, and it will be impossible to at all times arrive at a satisfying diagnosis, but every failure to make such diagnosis is a reproach to us until we have exhausted all means at our command to fathom the trouble. The general practitioner is too often careless and slipshod in his methods, and this we cannot afford for it leaves us open to criticism, and of that we receive an abundance without special invitation. Next to a careful investigation a fatihful record of our findings is essential in following our cases, and valuable and material points may be added at subsequent examinations to confirm or correct our previous conclusions. It is surprising how much can be learned from these records, many apparently minor points will be lost without the records, but when retained in proper order they may prove the key to the whole problem. Again, record making begets system and thoroughness in our work, which are factors so often lacking with most of us, and an intelligent patient can generally tell whether we are fishing for clues or systematically investigating the case and the value of your services will be estimated very much by their opinion of the thoroughness with which the work is done. I purposely avoid details for each must fit his methods to his surroundings and to his line of work, remembering that the more completely a subject is mastered the greater pleasure there will be in that study and the recognition by others of our efforts in that work. There is no place in this busy world for a lazy man, and least of all, in medicine, which is making more rapid advancement today and adding more each year to its store of knowledge than any other branch of science. It is also doing more for the world's welfare and happiness than any other calling. It has added six years to the "span of life" within the last quarter of a century, and we can challenge the world to show us anything comparable to such achievements, and we must, each of us, proud of our membership in the profession, do what little we can to advance the status of our calling to secure for it by the public, and before the law, such recognition as its merits deserve.

A banquet was served at 8 o'clock.

R. Grace Hendrick, Sec'y.

ST. JOSEPH COUNTY.

The regular meeting of the St. Joseph County Medical Society was held at Constantine, September 13, 1904.

W. C. Cameron, of White Pigeon, read a paper on "Local Treatment of Abscesses and Phlegmonous Conditions."

Abstract—

The old truism, "An ounce of prevention is worth a pound of cure," holds good in the treatment of abscesses and phlegmonous conditions, as does also the aphorism that "Pus having once formed, the quicker vent is given that pus by the knife, the less danger to the tissue involved, and therefore to the patient; provided more damage will not be done in reaching that pus than the pus itself will cause." This is especcially true when we deal with suppuration beneath any of the denser tissues of the body, where the well known law of pus advancing along the route of least resistance, in opposition to the law of gravity.

The general constitutional treatment consists in keeping the bowels lax and putting the patient on a nutritious diet. Of local remedies, rest of the part in an elevated position, to relieve pain and to lessen congestion is, above all imperative. Ice or cold applications are good treatment, but should not be used longer than twenty-four hours, for the reason that at the same time that it contracts the small vessels and inhibits the multiplication of microbes it diminishes collateral circulation.

Lead and opium wash, hot or cold, applied on gauze and covered with oiled silk is soothing and a very good treatment. Poultices being a hot-bed for microbes should not be used. Antiphlogistine fails to give any relief. The best treatment is heat in the form of hot boric acid fomentations, that is, pads of gauze wrung out of hot boric acid solution, an ounce to the quart, applied as hot as can be endured and covered with oiled silk to retain the heat and moisture. These should be frequently renewed so as to keep them always hot; and where it is applicable, as the hands or feet, the inflamed part should be

submerged in the hot boric acid solution itself, for a period of ten minutes every hour. This can be kept up continuously, no harm ensuing.

This treatment will relieve the pain and in many cases abort the inflammation. It acts by constricting arteries, lessening congestion and favors collateral circulation. It is often necessary to precede this by multiple incisions. Before incising, the part should be made as sterile as possible. The incisions should be free enough to evacuate all pus and kept open if needed by drainage tube or by packing with wet antiseptic gauze. The abscesses after incision must be irrigated daily. Abscesses should be opened at the most dependent part, and it is often best to make counter openings.

L. K. SLOTE, Sec'y.

VAN BUREN.

At the annual meeting of the Van Buren County Medical Society, held at Hartford, December 8, 1904, the following officers were elected for the ensuing year: President, N. A. Williams, Bangor; Vice-President, M. Springer, South Haven; Secretary and Treasurer, J. R. Giffen, Bangor; Delegate, J. C. Maxwell, Paw Paw; Alternate, N. A. Williams, Bangor.

A committee was appointed to draft resolutions relative to the communication received from Dr. Amberg in regard to treating the well-to-do at U. of M. Hospital and submit the same to the society at our next meeting. The general sentiment of the society was in favor of upholding the regents in every effort to maintain the high standard of the University Medical School, in which we all have a personal pride. The following resolutions were adopted by the society:

Whereas, It is contemplated to present a bill at the next session of our legislature for a law to secure state registration of nurses, therefore be it

Resolved, That the Van Buren County Medical Society approve and recommend such action.

L. G. RHODES,
O. M. VAUGHAN.
Committee.

Adopted.

Resolved, That the Van Buren County Medical Society endorse the effort of the special committee appointed by the Michigan State Medical Society to secure an appropriation from the state legislature to establish and maintain a state sanitarium for incipient tuberculosis.

GEO. D. CARNES,
WILBUR F. HOYT,
J. B. GRIFFEN,
Committee.

Adopted.

N. A. WILLIAMS, Sec'y.

WAYNE COUNTY.

The Wayne County Medical Society held its regular general meeting October 31, 1904. J. H. Carstens read a paper on "Stem Pessary for Dysmenorrhœa."

Abstract—

Painful menstration is caused by various pathological changes.

First, by abnormal formations of the pelvic organs, diseases of the tubes and ovaries, imperfections of the uterus, congestion and inflammation.

All these are distinct special varieties and require distinct special treatment according to the different conditions.

But there is a variety of dysmenorrhœa caused by a poorly developed uterus or premature atrophy, where any ordinary treatment or medication is of no avail, and in this variety the uterus must be developed. The use of dilators and electricity is of considerable benefit, but is troublesome and expensive, and must be long continued.

By introducing the stem pessary and keeping it in from three to six months or even longer, the uterus is developed, the pain relieved, and scanty menstruation increased. A good stem pessary is the hard rubber "Chapman."

All pelvic and ovarian inflammation must be rigidly excluded. Any general practitioner can introduce it, and the patient allowed to get out of bed in a few days and follow their usual vocation. The same surgical antiseptics must be observed as in any other operation. It should be introduced under an anesthetic, and if any pain or symptom of inflammation develops it can be readily removed.

H. W. Yates read a paper on "When Shall the Lacerated Cervix Uteri Be Repaired?"

W. F. STAPLETON, JR., Sec'y.

Meeting of the Surgical Section, November 28, 1904.

J. A. MacMillan presented a paper on "Fistula-in-ano."

The lessened resistance of the perirectal tissue due to the engorgement of the hemorrhoidal veins, consequent upon the upright position of man, and the invasion of this perirectal tissue by pyogenic organisms are important etiologic factors. The infection travels along the lines of least resistance and the sinuses thus formed open at one or more points into the bowel, as well as externally. Fistulæ are often found in patients having pulmonary tuberculosis. This may be due to the loss of fat in the ischio-rectal region and the general vital depression. Many such fistulæ are without symptoms. Lesions of the ano-rectal mucous membrane, ischio-rectal abscess and traumatism are also etiologic factors.

The diagnosis is made by inspection, palpation, and by exploration with proctoscope and fenestrated anoscope. The sinuses are traced out by means of injections of milk, potassium sium permanganate, etc., and also by probing.

Treatment. Patients in the advanced stages of tuberculosis, Bright's disease, diabetes or heart disease should not be subjected to radical operation, for under these conditions the wounds will not heal. In all other cases, radical operation should be advised. When refused, the bowels should be regulated, the external opening or openings widened and various antiseptic and stimulating solutions injected. Peroxide of hydrogen is probably the best cleansing solution.

In radical operations the entire track of the fistula must be laid open and an opening made into the gut, when a blind external fistula approaches the bowel. All the tissue is then divided over a grooved director. When the sphincters are cut, the incision should be at right angles to the fibres. Curetting and packing are the next steps.

The after treatment is most important, and it is on this that the success of the operation often depends. The purposes of the gauze packing are as follows:

(1) To control hemorrhage and give relief during the first twenty-four hours—firm packing.

(2 To keep the sides of the wound separated, during the second and third days—loose packing.

(3) To control exuberant granulations and maintain uniform healing, until healing is complete. Pressure from the gauze is applied as indicated, *i. e.*, firm packing where the granulations are exuberant and very loose where they are frail.

(4) It has the general function of drainage.

A. N. Collins reviewed very thoroughly the subject of "Hemorrhoids."

After giving the anatomy and pathology, the following etiologic points were noted: Increased abdominal pressure, causing obstruction to the back flow, such as that caused by constipation, pregnancy, tumors, misplaced uteri and inflammatory exudates about the tubes; prolonged straining at stool, as in stricture of the urethra, stone in the bladder or enlarged prostate; drastic cathartics; fæcal impaction; spasms of the sphincters and sedentary habits. Obstructed portal circulation does not predispose to hemorrhoids. Active congestion may be the starting point. The abuse of alcohol and condiments are causative factors.

The Symptoms. Itching, sense of weight, discomfort in sitting, pain and bleeding were reviewed. Prolapse and strangulation are secondary and may be very serious. Sloughing may cause a natural cure. Rectal catarrh may be a complication of internal hemorrhoids.

The diagnosis and differential diagnosis were reviewed.

Treatment. It should be our aim to first try to discover the cause and remove it. Regulation of the diet, bowels, habits and hygiene and the exhibition of drugs may be needed. In the writer's experience, cold water injections while at stool have given most excellent results.

The following methods of radical operation have been advocated:

(1) Excision with knife or scissors.
(2) Whitehead operation.
(3) Removal with the ecraseur.
(4) Application of caustic pastes.
(5) Injection of carbolic acid and other fluids.
(6) Puntate cauterization.
(7) Removal by galvano-cautery wire.
(8) Removal by clamp and scissors.
(9) Dilatation of the sphincter muscles.
(10) Ligature.
(11) Removal by the screw crusher.

The clamp and cautery method seems as efficient as any. Whitehead's operation is undoubtedly good. The author, however, prefers the removal by excision, only the bleeding points being tied. Simple ligature is unsurgical and injections are dangerous. It is the author's opinion that we can find no more certain definite surgical procedure than to slit the mucous mem-

brane longitudinally, dissect out the dilated vessels and tie the bleeding points. We can then go as far as we need and no farther, which can not be so truly said of any other method.

H. W. Longyear.—In the treatment of fistula, all indorse the healing by granulation, but there are cases of simple fistula in which the sphincter can be saved. The fistulous track is disected out, the parts thoroughly disinfected and then brought together by sutures.

In the treatment of hemorrhoids, one should always aim to bring about healing by first intention. The dissection out of the dilated vessels and the suturing of the edges of the mucous membrane with fine chromic cat gut is the method which I prefer. I have here a special clamp, which I have devised for this purpose. With it the edges of the mucous membrane can be held without crushing and the sutures put in place. It can be done very quickly.

L. J. Hirschman.—The subject of fistula is always interesting. At best the results of treatment are favorable in only about 45 per cent. of all cases. Simple, straight or slightly curved fistulæ should be dissected out and an attempt made at healing by first intention. When the opening into the bowel is low, a flap of mucous membrane should be brought down and sutured over it. In the case of an apparently blind fistula I do not believe that a probe should be forced through the bowel as advocated by Dr. MacMillan. To prevent leaving behind any ramifications of the sinus, it is well to inject methylene blue into the sius. While fistulæ in tuberculous patients should often be left alone, tuberculosis fistulæ should be operated upon promptly, like any other focus of tuberculosis.

W. F. Metcalf.—I do not believe that cases of ischio-rectal abscess should be made into complete fistulæ by forcing a probe through into the bowel. I have found the closed operation, mentioned by Dr. Longyear, a good one in old cases, but in acute infections it is not satisfactory. Openings into the bowel should be closed with mucous membrane, a Whitehead operation being done if necessary.

In the treatment of hemorrhoids I have not used the cautery in ten years.

E. B. Smith and J. A. Attridge also spoke.

B. R. SCHENCK.
Sec'y. Surgical Section.

Transmission of Syphilis.—1. Sore throat and fever are not infrequently, especially in women, the first discovered symptoms of syphilis. I have known recent syphilis of the throat in each of two married women whose respective husbands were under my care for syphilis, treated as diphtheria; in one antitoxin had been injected. In another case, sore throat with fever was called tonsillitis, until a pink eruption on the chest was noticed, whereupon the diagnosis was changed to scarlet fever, and the house was quaranteened. A girl just recovering from alleged quinsy and canker sores, really syphilis of the throat and mouth—inoculated her lover's lips with a chancre. Examination confirmed her assertion of virginity, but revealed a scaby, indurated papule on her left nipple, to which she admitted having applied on several occasions, the sickly, fretful infant of her married sister with whom she lived. This child had mucous patches and snuffles; its father was syphilitic. It behooves us not merely to divorce our conception of the chancre from sexual immoralıty and from the genitals, which most of us do—but also to eliminate the chancre from our conception of the essential clinical features of syphilis—which some of us do not—and to regard a sore throat with fever, especially in adults, as a possible manifestation of acute syphilis, as well as of tonsillitis, diphtheria and scarlet fever.

2. Syphilis could be minimized, if not virtually eradicated, far more quickly, surely and easily than tuberculosis, not by licensing prostitutes nor by educating youth to chastity, but by making the acquisition of syphilis practically impossible through the general practice of circumcision. That the notorious infrequency of syphilis among the Jews is not due to their superior continence is shown by their acquisition of their full share of gonorrhœa. That it is due to the toughening of the penile covering resulting from early circumcision is obvious, and is illustrated by the rarity of syphilis among all other circumcised races. The Egyptian practice of circumcision just before puberty is one of the several facts suggesting that the general adoption of this measure by the early Semitic races was for protection against syphilis.

3. The later evils of syphilis can be restricted by impressing upon the subjects of the disease two injunctions to take anti-syphilitic remedies for two months in every year after the termination of active treatment and to inform any physician consulted for relief from an obscure, chronic ailment of the earlier syphilitic infection.—(*Medical Record,* December 17, 1904, W. T. BELFIELD.)

Miscellaneous.

NEWS ITEMS.

A report is current that Dr. William H. Welsh, Professor of Pathology at Johns Hopkins, will succeed Professor Osler as Professor of Medicine on the latter's departure for Oxford, England.

The Civil Service Commission has ruled that the commission of medical experts appointed last year by the city authorities to investigate cases of acute respiratory diseases in the city with a view to lessening them, can not employ assistants in other cities unless the physicians so employed first come to New York and undergo a municipal civil service examination. The ruling has surprised the expert commission, which is composed of Drs. William Osler, William H. Welsh, Edward G. Janaway, T. Mitchell Prudden, L. Emmett Holt, Frank Billings, John M. Musser and Theobald Smith. To pay the expenses of the commission's work the Board of Estimates made an appropriation of $10,000 to assist them in their researches. The members of the commission asked leave to appoint without competitive examinations physicians of Baltimore, Philadelphia and Boston to collect data, statistics and other material of value to them from those centers of population. It was proposed to pay these physicians $100 a month. The Civil Service Commission refuses the request.

Dr. Warren, Food Commissioner of Pennsylvania, from a thousand samples of whisky collected from the state, says that ninety-five per cent. showed the presence of wood alcohol in poisonous quantities and India pepper (to give it "snap"). Some samples contained arsenic, turpentine and traces of prussic acid.

Dr. James G. Hyndman died in Cincinnati after an operation for appendicitis September 18th. He was formerly secretary of the Ohio Medical College, and professor of Laryngology.

New York City makes free of charge the Widal blood examination, the Ehrlich diazo reaction, blood examinations for malaria, and sputum analysis.

Koch says that he leaves the farther study of tuberculosis to others, and will return to German Africa to study cattle disease transmitted by the tick.

Statistics issued by the Milwaukee Health Department show that that city leads all cities in the United States in the matter of mortality percentage. The Milwaukee rate for 1903 was 12.99. Detroit was second with 13.45.

The first meeting of the Ninth District Medical Society was held at Traverse City November 15, 1904. All felt that the meeting was a source of profit and pleasure, and it was the general opinion that it should be a yearly occurrence.

CHANGE IN MEMBERSHIP.

(Nov. 15th to Dec. 15th.)

NEW MEMBERS.

A. Ahlborn, Detroit, Mich.
F. D. Baker, Flint, Mich.
R. Beattie, Detroit, Mich.
G. W. Chisholm, Pontiac, Mich.
R. W. Chivers, Jackson, Mich.
J. C. Dodds, Detroit, Mich.
S. P. S. Edwards, Moline, Ill.
F. W. Freeman, Saginaw, Mich.
J. W. Gething, Battle Creek, Mich.
S. W. Given, Flint, Mich.
C. S. Gorsline, Battle Creek, Mich.
E. C. Greene, Pontiac, Mich
J. F. Gruber, Mesick, Mich.
T. C. Henry, Jackson, Mich.
L. Kahn, Saginaw, Mich.
G. Krausman, Detroit, Mich.
H. M. Leach, Saginaw, Mich.
J. F. Lemon Dansville, Mich.
A. B. Lull, Batle Creek, Mich.
C. W. McColl, Wyandotte, Mich.
Dr. McGregor, Burnside, Mich.
T. A. Millard, Detroit, Mich.
H. J. Myer, Saginaw, Mich.
R. Opperman, Detroit, Mich.
Thomas Potter, Detroit, Mich.
A. J. Read, Battle Creek, Mich.
O. L. Ricker, Cadillac, Mich.
G. A. Robertson, Jr., Battle Creek, Mich.
A. S. Rogers, Saginaw, Mich.
E. C. Rumer, Davison, Mich.
G. A. Seybold, Jackson, Mich.
L. E. Simpson, Pontiac, Mich.

C. E. Skinner, Howell, Mich.
T. E. Smith, Detroit, Mich.
T. P. Sprague, Wyandotte, Mich.
G. W. Stewart, Saginaw, Mich.
F. V. Stutzke, Detroit, Mich.
H. C. Switzer, Gaines, Mich.
P. B. Taylor, Clio, Mich.
R. Van Baalen, Detroit, Mich.
T. M. Williamson, Saginaw, Mich.
H. R. Wilson, Saginaw, Mich.

CHANGE OF ADDRESS.

E. J. Covey, Swartz Creek, Mich.
P. E. Marsh, Otter Lake, Mich.
W. S. Shipp, Battle Creek, Mich.

DIED.

Emma L. Clawson, Battle Creek, Mich.
E. H. Coller, Battle Creek, Mich.
J. H. Taylor, Lapeer, Mich.

BOOKS RECEIVED.

Thirtieth Annual Report Michigan State Board of Health, 1902.

Seventh General Conference of Health Officials in Michigan, 1904.

Laboratory Manual of Human Anatomy. L. F. Barker. J. B. Lippincott & Co., Philadelphia and London.

Present Position of the Surgery of the Hypertrophied Prostate.—1. Enlargement of the prostate has been attributed to various causes, none of which have as yet been demonstrated. 2. In prostatic symptomatology, nothing new that has any important bearing on the diagnosis or prognosis has been added to our knowledge during the last decade. (*a*) Subjective symptoms, excited by prostatic hypertrophy are frequency of urination, difficulty in starting the stream, feebleness of the stream, interrupted urination, urinary incontinence, retention of urine, changes in urine, sensory disturbance and constitutional changes. (*b*) Objective symptoms are still elicited by measuring quantity of residual urine, digital rectal examination and by instrumental examination to determine the length of urethra, seat, nature and degree of obstruction, tonicity of bladder, and conditions of ureters, renal pelvic and kidneys.

3. In considering the indications for treatment, the classification of cases of prostatic hypertrophy is of interest. It is well to determine predominant character of the growth, whether soft, indicating excess of grandular and muscular elements, or hard, showing advanced fibroid change. The distinction can be made more simply and accurately by rectal palpation than by any other method; (*b*) the seat of the growth, median, lateral or general; (*c*) the presence or absence of general arteriosclerosis; and (*d*) condition of the vesical mucosa and of the upper urinary tract as to pyogenic injection.

4. As to the various possible plans of managing a case of prostatic hypertrophy it may be said: (*a*) That a purely expectant treatment is proper only in those cases (usually discovered during a rectal examination, made for other purposes) in which the enlargement has produced no symptoms, catheterism is easy, and there is no residual urine. (*b*) That no medical treatment is worthy of consideration except as, by means of urinary antiseptics, it may tend to prevent or mitigate the occurrence of infection. (*c*) Palliative treatment consists in either the systematic use of instruments for the purposes of dilatation or in the employment of a catheter. A patient who presents the symptoms of the prostato-vesical congestion of the early stages of hypertrophy, who is disturbed once or twice at night, who has an enlargement of moderate density, appreciable through the rectum, but not offering much resistance to the introduction of an ordinary catheter, and who has but litle residual urine, is likely to derive great benefit from systematic introduction of full-sized steel sounds. That this can have any curative effect is unlikely. Catheterism should be systematically employed in cases in which the quantity of residual urine is three to four ounces or more, and in which the introduction of the instrument is easy and painless and the urine is sterile. (*d*) Operative treatment should now be regarded as distinctly indicated whenever a progressive prostatic hypertrophy exists or when, even in patients with but moderate obstruction, a good compensatory hypertrophy of the bladder and a small amount of residual urine, catheterism is becoming more painful or more difficult, the urine shows fermentative changes and the visical congestion is passing into a true ceptitis.

5. Operation of choice. (*a*) Operations directed to procure shrinkage of the prostate by operations in the sexual apparatus (castartory vasectomy). The author believes in properly selected cases, these operations are likely to have a low mortality, and when fully successful, they secure a return to a condition more closely resembling the normal than most of the other operations looking toward a radical cure of the hypertrophied prostate. (*b*) Direct removal of the enlarged gland. The author favors the "total enucleation" operation of Freyer, and feels that past experience does not justify the expectation that the results of prostatectomy by the perineal route will compare favorably with the suprapubic operation of Freyer (*Annals of Surgery,* December, 1904, J. WILLIAM WHITE).

Book Notices.

Under the charge of
RAY CONNOR.

A Laboratory Manual of Human Anatomy. By Lewellys F. Barker, M. B. Assisted by D. DeWitt Lewis, M. D., and Daniel G. Revell, M. D. 583 pages. 298 illustrations. Cloth, $5.00. J. B. Lippincott & Co. Philadelphia and London, 1904.

This handsome book is intended to fill a gap in our present supply of text books. It is an attempt to make the work of the anatomical laboratory somewhat easier for both student and teacher. Much excellent advice is to be found in the introduction as to instruments needed, their care and use, the preservation of the part, clothing for the dissector, drawing, books, etc.

It is not purposed that all human anatomy should be found in 600 pages, but the student is urged to seek further a field, and at least gain some idea of the extent of the literature on the subject. The nomenclature, formulated by the German Society of Anatomists, and employed in the atlases of Spalteholz & Toldt, has been used throughout.

The body of the book is divided into five parts considering the upper and lower extremities, head and neck and dorsum of trunk, thorax and abdomen and pelvis. The illustrations are well chosen with the idea of supplementing Spalteholtz's Atlas. Many are taken from Toldt's splendid work. The mechanical work is very well done, and three sets of indices add to the completeness and usefulness of the work.

International Clinics. A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles. Edited by A. O. J. Kelly, A. M., M. D., Vol. iii. Fourteenth Series, pp. 302. Cloth, $2.00. J. B. Lippincott Co. Philadelpria, 1904.

The present volume is given over to the consideration of points of interest on syphilis, treatment, medicine, surgery, gynecology and neurology. Among the contributions on syphilis which take up nearly one-half of the volume, is an interesting essay by Prof. Fournier in "Syphilis and Suicide," in which he cites cases of his own and the various causes which lead syphilitic patients to take their own lives.

Clinics by such well known teachers as William G. Spiller, Isman Boas and William H. Katzenbach, are included in this volume. While the value of this kind of publication may be open to question, its popularity is attested by its continuance. The papers are well written and include a wide range of subjects, all of them of greater or less interest to the general practitioner for whom they are evidently intended. Many of the articles are well illustrated.

The Surgical Treatment of Bright's Disease. By George M. Edebohls, A. M., M. D., LL.D. Pages 327. Price, cloth, $2. Frank F. Lisiecki, Publisher. New York, 1904.

In no department has surgery made more rapid strides, during the past five years, than in that relating to the urinary organs. It is fair to say that no one of our surgeons has made more valuable contributions to our knowledge of the surgical diseases of the kidney and to the technics of renal operations than has Dr. Edebohls. His work on the decapsulation of the kidney as a therapeutic measure in chronic Bright's disease is more or less familiar to all, from the numerous articles published by him in the various medical periodicals. These have been collected and added to in a recent book, entitled "Surgical Treatment of Bright's Disease." About three-fifths of the book is made up of new matter and the whole subject clearly and carefully brought up to August of this year.

Lack of space forbids a review as complete as the subject deserves. Only a few of the important points can be noted.

The beneficient results are not due to the simple relief of renal tension, for in chronic Bright's disease the capsule never compresses the tissue, although it may be adherent. The operation results in the formation of strong connective tissue bands, attaching the kidney to its surroundings. In these bands are numerous large blood vessels. The arteries are larger and more numerous than the veins and in all of them the direction of the blood current is toward the kidney. To this vast increase in the blood supply is due the improvement following decapsulation.

The method of operating is clearly set forth.

The histories of 72 patients who have undergone operation, prior to January 1, 1904, are most carefully reported. Seventeen have been cured. Twenty have improved, a majority of them being on the high road to complete health and bid fair to figure among the cures in the next report.

The complete bibliography is most valuable.

The frankness of the report and the painstaking care in reporting the cases and in keeping post-operative details can not be too highly praised B. R. S.

BLOOD-PRESSURE AS AFFECTING HEART, BRAIN, KIDNEYS AND GENERAL CIRCULATION. A PRACTICAL CONSIDERATION OF THEORY AND TREATMENT. By Louis F. Bishop, A. M., M. D. 12mo. 112 pages. (Cloth, $1.00. E. B. Treat & Co., New York City, 1904.

This little book deals with the subject under discussion not from the laboratory and mechanical point of view, but rather from the clinical and practical side. The primary low-pressure cases are differentiated from the primary high-pressure ones on the one hand, and the secondary low-pressure ones on the other. Some practical therapeutic points are given and the book is gotten up in neat and attractive style.

NEW METHODS OF TREATMENT. By Dr. Laumonier. Translated by H. W. Syers, M. A., M. D. 321 pages. Cloth, $2.50 net. W. T. Keener & Co., Chicago, 1904.

This translation is based on the second French edition dated about one year ago. Although from the nature of the subject, new drugs appear before any book can get through the press, especially in two languages, nevertheless the work before us is a mine of information as to the nature of new drugs, many of which are familiar only by name.

The work is divided into eleven chapters on the various subjects, and only the newer drugs are considered. Many new forms of treatment such as opotherapy, zomotherapy, intra-pulmonary injections, etc., are given, and the results obtained stated.

The book is neatly gotten up, with clear type on good paper. The proof reading is well done and an index adds to its value. It should prove of service in helping to keep in touch with the newer forms of therapy.

THE MEDICAL DIRECTORY OF NEW YORK, NEW JERSEY AND CONNECTICUT. Published by the New York State Medical Association. Volume VI. New York, 1904-5.

The excellence of the work which the New York State Medical Association has done for the profession is well known to all who have seen this publication. The information contained in its pages covers over 15,000 names, and is of immense value to the profession as well as the public. The use of different colored paper for the various parts of the book makes it exceedingly easy of reference. It is a fine example of what a well organized profession can do for itself in one of many possible ways.

SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF ANATOMY; INCLUDING THE ANATOMY OF THE VISCERA. By Charles B. Nancrede, M. D. Seventh Edition. Thoroughly Revised. 12mo. volume of 419 pages, 150 illustrations. Philadelphia, New York, London: W. B. Saunders & Co., 1904. Cloth, $1.00 net.

In this last edition, the author has re-read the entire book and re-written the section on the Nervous System. The original plan of the work has not been changed. That it meets a real need with students is evidenced by the continued demand through so many successive editions.

SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF BACTERIOLOGY. By M. V. Ball, M. D. Fifth Edition. Thoroughly Revised. By Karl M. Vogel, M. D. 12mo. volume of 343 pages with 96 illustrations, some in colors and six plates. Cloth, $1.00 net. Philadelphia, New York, London: W. B. Saunders. 1904.

The advances in bacteriology are so rapid that a revision of even so brief and concise a book as the one before us is required every few years. The method of question and answer is not used in this compend as in most of the others of this series. This edition aims to reflect as nearly as possible bacteriology as it exists to-day.

SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF MATERIA MEDICA AND PRESCRIPTION WRITING. By Henry Morris, M. D. Sixth Edition, thoroughly revised. By W. A. Bastedo, Ph. G., M. D. 12mo., volume of 295 pages. Cloth, $1.00 net. Philadelphia, New York, London: W. B. Saunders & Co., 1904.

In preparing the sixth edition of Dr. Morris' "Essentials of Materia Medica," no change has been made in the character or scope of the work. Some chapters have been re-written and articles added on adrenalin, stypticin and the iodine and silver synthetics.

SAUNDERS' QUESTION COMPENDS. ESSENTIALS OF NERVOUS DISEASES AND INSANITY: THEIR SYMPTOMS AND TREATMENT. By John C. Shaw, M. D. Fourth Edition. Thoroughly Revised. By S. E. Jelliffe, Ph. G., M. D. 12mo. volume of 196 pages, 52 illustrations. Cloth, $1.00 net. Philadelphia, New York, London: W. B. Saunders & Co., 1904.

The present volume has been entirely recast and the effort made to bring it in line with what is known to-day of diseases of the nervous system. Owing to the size of the book, a complete discussion of some of the rarer forms of nervous disease cannot be attempted, but reference is made to them in connection with their kindred diseases.

BLAKISTON'S QUIZ-COMPENDS. A COMPEND OF MEDICAL LATIN. DESIGNED EXPRESSLY FOR ELEMENTARY TRAINING OF MEDICAL STUDENTS. By W. T. St. Clair. A. M. Second Edition. 132 pages. Cloth, $1.00 net. P. Blakiston's Son & Co. Philadelphia. 1904.

This work should prove of value to those medical students whose early training did not include any Latin. Twenty-two lessons are given covering the five declensions, four conjugations, etc. A list of abbreviations is added and short vocabularies conclude the book. The form and general appearance of the volume matches the rest of the series.

A PHILOSOPHY OF THERAPEUTICS. By E. C. Price, M. D. 336 pages. Cloth, $2.00. Nunn & Co., Baltimore, 1904.

This neat little book is dedicated to the memory of those two "immortals, Galen and Hahnemann." It endeavors to lay down a philosophy of therapeutics founded on two postulates: first, that it is the human organism that is the active factor in the healing of the sick and not drugs, and second, that there are two therapeutic laws.

Among the works consulted are many well known works on therapeutics, such as Cushny and Hare, as well as many more on homeopathic subjects. It aims to bring the disagreeing elements to a common unity based on the prime object of all good physicians, namely, the greatest good to their patients.

Progress of Medical Science.

MEDICINE.

Under charge of

HARRISON D. JENKS.

Internal Secretions.—W. H. Thomson gives a very interesting resumé of our knowledge of "Internal Secretions." This will include such gland secretion as cannot be collected and examined in the usual way. It has only been since we have been examining patients in whom such glands were wanting, or at least not functionating that we have got any idea of what role they play in the organism. That it is a very important one is now generally believed. Yet their importance is probably not yet fully realized. There seems no common agreement about many of the secretions of the body even where they can be easily collected.

SPLEEN—While it is the largest ductless gland, it seems to have little important function, for its total removal is possible with perfect health. It is a sort of diverticulum in the portal circulation and not a gland proper.

THYMUS.—This is intimately connected with the origin of white blood corpuscles. Its activity is greatest in early childhood. In 18 infants dying of marasmus, not due to improper feeding or intercurrent disease, the only lesion found was atrophy of the thymus, from 12 grammes to 2.2 grammes. Atrophy of the thymus is always found in infantile atrophy, and the condition of the thymus is an index of the nutrition of the infant. Sudden death in children is most often caused by the hypertrophy of the gland. It may be an indicator of a general increase in the lymphoid tissue in the body. It may be stated that undue cell proliferation is always a sign of deficient nutrition.

THYROID GLAND.—This gland adds an important secretion of the blood, of value in maintaining the nutrition. Recently small bodies have been found, either closely associated with the thyroid or else imbedded in the thyroid, called parathyroids. They seem entirely separate in function from the thyroid. It would seem as though these parathyroid bodies might have an antitoxic property by which poisons in the body may be neutralized. For when the parathyroid bodies are removed, a virulent poison acting on the nervous system is developed, causing fatal tetany, rapid breathing, convulsions, etc. These symptoms can be prevented by bleeding and injection of normal salt solution. In Graves' Disease are the characteristic symptoms due to an excess of thyroid secretion or to a deficiency of parathyroid secretion? Indications rather point to trouble with the parathyroids. Enlargement of the thyroid is common and yet unassociated with any symptoms of Graves' Disease. Yet in the latter disease there may be no enlargement at all of the thyroid.

Thompson believes that the thyroid is not the primary seat of the disease at all, but only secondarily involved in some cases, enlarged by the blood toxine, in others unaffected. That the toxine is of gastrointestinal origin and that treatment should be along that line.

The thyroid secretion is probably intimately connected with the nutrition of the connective tissue, and in myœdema the mucoid infiltration is due to degenerative changes in fibrous and connective tissue.

PITUITARY GLAND.—In many cases of acromegaly some trouble is found with this gland, but it seems secondary to hypertrophy of the bony structure within which it lies. Acromegaly does not seem due to derangement of the internal secretions but to some unknown nurtitional trouble.

PANCREAS.—The secretion from this gland has the widest solvent properties on starch, fats, protieds, but it has in the Islands of Langerhans something to add to the blood, something that prevents diabetes. If totally extirpated marked diabetic symptoms at once ensue, while if part of it is left in the symptoms do not occur. The muscular tissues are the chief generators of animal heat, and they have the function of oxidation as well. Otto Cohnheim has lately found an enzyme produced in muscle which alone does not act on sugar, but mixed with the secretion from the Islands of Langerhans acts strongly on sugar. He believes it will account for all the sugar combustion in the body.

ADRENALS.—The properties of internal secretion of the adrenals indicate that the vast mechanism of muscle throughout the body, both striped and unstriped, depends for its healthy tone not only upon the constant stream of efferent nerve energy, but equally upon the presence in the blood of this active principle of the adrenals." It is fair to surmise that the high tension pulse so often met with in different conditions, notably in nephritis, is due to the presence of adrenal in the blood; the inflammatory condition of the adrenal glands may be due and transmitted from the inflammatory trouble situated in kidney lying near it.—(*New York Medical Journal*, November 19 and 26, 1904.)

SURGERY.

Under the charge of

MAX BALLIN.

Has Gelatine Any Influence on the Coagulation of the Blood?.—Gelatine hastens the coagulation of the blood. For hemorrhages, gelatine can be applied locally, internally or hypodermically. Careful sterilization of the gelatine is very important, as infections with tetanus have occurred. An entirely safe procedure of sterilizing gelatine without sacrificing its hemostatic qualities, is to put it in a steam sterilizer for thirty minutes, at a temperature of 100C., and repeat this for five consecutive days. (H. KAPOSE, *Mitteilungen aus den Grenzgebieten der Medicin und Chirurgie,* Vol. 13, III.)

Typhoid-bacilli in Abscess with Widal's Reaction Twenty-three Years After Recovery From Typhoid Fever.—A man sixty-one years old had had a severe attack of typhoid fever in 1881. During convalescence from the fever an abscess developed over the left lower costal cartilages. The abscess required several incisions; frequent attacks of suppuration during the next few years were treated by incision, curetting and resection of part of the sternum and ribs. In September, 1903, a new abscess formed. The pus of this abscess contained typhoid-bacilli, also the blood of the patient gave Widal's reaction at this time—twenty-three years after primary infection with typhoid. (HARBORDT, *Zentral-blatt fuer Chirurgie,* 1904. 44.)

Operative Treatment of Perforating Gastric Ulcer.—Atherton reports a third consecutive successful case of suture for above condition and concludes from this experience as follows: "The main element in securing a favorable result in operations for perforated gastric ulcer is unquestionably an early diagnosis and a prompt resort to surgical treatment. The chief reliance should be placed on the location and severity of the pain, together with the board-like hardness of the abdominal muscles, in determining the diagnosis. Considerable help is afforded in most cases by the previous history of dyspeptic symptoms. Not much dependence can be placed on the absence or otherwise of liver dullness. Only once in some half-dozen of these cases have I noticed so much tympanites as to obscure the normal percussion sound over that organ. Neither can we derive much help from observing the presence or absence of shock. Usually, more or less will be met with at the outset, but this is not always the case. Some vomiting commonly occurs, and at times a little blood is found in the vomited matter.—(A. B. ATHERTON—*Annals of Surgery,* November, 1904.)

The Bridging of Nerve Defects.—Powers reviews the results of operation in cases in which approximation of the divided nerve segments by simple suture is impossible.

1. Nerve-grafting, that is, grafting of the piece of a dog's nerve into the defect. Of 22 cases, 16 were complete failures, 3 doubtful, 3 good results.

2. Flap-operation, neuroplasty. The principle of this operation is: A portion of the central or peripheral or both ends is partly detached, turned back and united to the other end or flap. Of six cases, two were failures, four complete or partial successes.

3. Implantation or Anastomosis, that is, implanting the distal end of the divided nerve, into an adjacent nerve. For instance, implantation of the divided median into the ulnar nerve, or of the peroneal, into the internal popliteal nerve. The results were encouraging in six of ten cases.

4. Resection of bones. In order to approximate divided nerve ends a segment of long bone is resected. The method was employed mainly in those cases in which the bone was also injured in the original traumatism.

5. Suture à Distance. That is, bridging the nerve defect with loops of catgut. Some positive results are reported.

6. Tubulization. That is to promote nerve regeneration along the natural paths. Surgeons have made use of barriers to prevent the fusion of nerve substance with the surrounding tissues. Results negative.

Conclusion: It hardly seems possible at this time to say definitely what form of bridging should be employed. More cases, and especially cases recorded later and better, are needed. Neuroplasty and implantation (anastomosis) are always available resources, and for the present it would seem that they should be preferred. Resection of bone may be advisable in selected cases. Transplantation of foreign grafts should be abandoned. It is hardly necessary to say that prognosis in an individual case should always be guarded, and that repeated operations may be necessary.—(CHARLES A. POWERS, *Annals of Surgery,* November, 1904.)

GYNECOLOGY AND OBSTETRICS.

Under the charge of

B. R. SCHENCK.

Treatment of Pathologic Face and Brow Presentations.—J. B. DeLee gives as the result of a study of twenty-one personal cases of face presentation, the following directions for their management. 1. With normal pelvis and normal child, with the chin anterior, watchful expectancy. 2. Normal pelvis, normal child, chin posterior, at first expectancy; when the chin shows any tendency to rotate to the front, manual correction to occipital presentation; failing in this, podalic verson. 3. Normal pelvis and child, face deep in pelvis with chin anterior and a strict indication for delivery, forceps are to be used. 4. Normal pelvis and child, face deep in the pelvis with chin in posterior positon, manual correction when version is contraindicated. If this fails, craniotomy or symphsiotomy are the alternatives. 5. In the mildly contracted flat pelvis with normal child, version should be elected. 6. Contracted pelvis of mild degree, normal child, manual correction followed by expectancy. 7. Face presentation, complicated by palcenta previa, prolapse of the cord or extremities, rigidity of the cervix, threatened rupture of the uterus, or a dead child, monstrosity or a highly contracted pelvis, offers no good field for manual correction, although it can be done.—(*American Medicine*, Nov. 12, 1904.)

Danger in the Use of the Glass Catheter during Parturition.—Hunner reports an interesting case, in which he removed five pieces of glass tubing from the bladder through a Kelly cystoscope.

The history as given by the attending obstetrician was as follows: While delivering the patient, a primipara, aged 21, he discovered the bladder full of urine, after the first stage had progressed for eight hours, and, as was his custom, he passed an ordinary sterilized glass catheter. The child's head was engaged and had to be pushed up before the catheter could be inserted. During the catheterization, a labor pain came on, with the result that the catheter was caught between the descending head and the symphysis pubis and almost half of its length was left in the bladder.

On account of the discomfort which cystoscopic examination would cause so soon after labor and the danger of infection at that time, and despite the probability of the development of a traumatic cystitis, which, however, readily responds to treatment, it was decided to postpone the search for the missing portions until about the tenth day.

On that day, for the first time, urination became somewhat frequent. The patient was then placed on a padded table in the Sims position, the parts thoroughly cleansed and a solution of 10 per cent. cocaine introduced into the urethra. A number 10 cystoscope was then inserted, without causing pain, and a piece of catheter nearly two inches in length withdrawn. No other pieces could be seen.

The knee chest position was then assumed, causing the fundus vesicae to thoroughly dilate. Four smaller pieces were then readily seen and removed. Under urotropin, the mild cystitis rapidly cleared up.

Hunner, in commenting on this case, points out the danger of using a glass catheter during labor. Theoretically there would be some danger of perforation, were a metal catheter to be used. Although the manipulation of a soft rubber catheter, in an aseptic manner, is more difficult, it undoubtedly offers the only method of avoiding traumatic injury in catheterizing during the second and third stages of labor. (*American Medicine*, Nov. 5, 1904.)

Value of Abdominal Hysterectomy for Carcinoma Uteri.—Since Wertheim, four years ago, advocated the more radical extirpation of the pelvic tissues in doing hysterectomy for carcinoma, his statistics have been eagerly awaited. He now announces that his results are incomparably better than before the extended operation was employed.

Out of fourteen cases, nine are free from recurrence after four years; of thirty-one, nineteen are free after three years; of forty-three cases, twenty-six are free after two years. Since adopting this method, the operability of all cases has been increased from twenty-nine to fifty-one per cent.

Wertheim never operates through the vagina except in cases of incipient cancroid of the vaginal portion of the cervix, but believes in doing the abdominal operation and removing all of the glands possible. Recurrence was noted in less than one-third of the cases in which the removed glands showed no evidence of metastasis.

The most enthusiastic of the advocates of vaginal hysterectomy can harldy show results comparable to Werthheim's. —(*Wiener klin Woch. XVII*, No. 28.)

PHARMACOLOGY AND THERAPEUTICS.

Under the charge of

W. F. WILSON, JR.

Medical Treatment of Gastric Ulcer.—The two cardinal points in every ulcer cure and regimen are rest and milk diet. As soon as the cure is begun and the patient settled in bed, a period of absolute abstention from food by the stomach should be inaugurated. Nothing but water and pieces of ice should be swallowed. Both the loss of nourishment and the loss of fluid may be supplied in some measure by nutrient and saline enemata, although these are poor substitutes and cannot be continued indefinitely. The method of using nutrient enemata is to give the patient daily, in the morning, a high lavage of the colon, say of four quarts of normal saline solution. After a rest of at least an hour nutrient enemata may be given, and may be continued at intervals of four hours during the day. Each enema should not exceed four ounces in bulk, and may consist of egg, milk, meat, broths, or of combinations of these foods. All the foods so used should be predigested to a degree of complete peptonization by means of pancratic extracts and bicarbonate of soda. There is a wide spread habit in practice to use this peptonizing process only for milk and to add to it only the preparations of meat peptones which are on the market. The freshly prepared peptonized broths and eggs are as easily made as is peptonized milk, and one avoids thus use of alcohol. Gastric feeding may be resumed in mild cases within four days, but in the severer cases it will be necessary to wait a full week or more. The first food used is peptonized milk in small quantities, gradually increased until the patient is takng two quarts a day. During the third week cooked cereal gruels may be added to the milk. The fourth week will see added to the dietary crust of bread, butter and boiled egg. The fifth week, one may add potatoes, rice, boiled macaroni, custards, chicken and sweet breads. The final, or sixth week, the diet should be increased to include beef, mutton, green vegetables, light salad without vinegar, cooked fruits and simple puddings.

Drug measures: The principal astringents used are the percloride of iron and the nitrate of silver, of which the latter gives the best results. The use of bismuth has claimed for it an antiseptic and astringent action, as well as a direct action to reduce the hyperacidity in addition to the mechanical protective effect of the large doses (2 1-2 to 5 drachms daily). The olive oil cure of Cohnheim is used also to form a protective coating to the ulcer, to relieve the pain and vomiting and the tendency to pyloric spasms, to check the secretions of acid, and because of its food value. Anti-emetics will often prove of value, and anodynes as cocaine, codeine, and anesthesin will often control attacks of gastralgia.. Morphine should be avoided because it tends to increase acidity. The most efficient drugs to combat the constipation of these patients are the alkaline salines. For large accumulation in the colon enemata are used. The condition of uræmia will require general treatment, and iron will be needed. The occurrence of active hemorrhage suggests surgical interference. The medical measures to be employed to combat it are absolute rest, local application of ice to epigastrium, and ice by mouth. There is only one drug which is of service, morphine hypodermically. The loss of fluid and consequent thirst may be overcome by means of saline enemata.—(*The American Journal Medical Science,* Dec., 1904, LAMBERT.)

Treatment of Sea-sickness.—A broad, tight flannel belt should be worn, and at first the patient should stay on deck. Usually lying on the back is to be preferred. The food most readily retained is dry biscuit, buttered and lightly sprinkled with cayenne pepper and roasted, or egg flip. In every severe case the less fluid taken the better. Alcohol is inadvisable until the worst is over. The following is the prescription used: Two drachms of syrup of chloral and one-half dram of ammonia bromide made up to one and one-half ounces with water. If this fails, give one minim doses of tincture iodine in water every half hour. If seen after a day or two, give initial purge of calomel.—(*British Medical Journal,* Nov. 9, 1904).

Treatment of Blenorrhagia.—The author considers that the method of Düring (rest in bed and appropriate regulations), when it is applicable, gives some very superior results. When patient cannot remain in bed, santal wood oil is given during the acute stage. Later irrigations of permanganate of potash are employed at policlinic and patient uses injections at home of protargol or of nitrate of silver 1 to 1000 or 1 to 500. At end of 15 days, injections of resorcin (1 to 30) are prescribed. In cases of ceptitis, tablets of helmitol gr. v. (6 a day) give excellent results. Irrigation of permanganate are given at the same time. In cases of prostatitis, massage is employed twice a week, and one installation of nitrate of silver (1 to 200 to 1 to 100) is given—(*The American Journal of Urology,* December, 1900, BERING.

DERMATOLOGY, SYPHILIS AND CUTANEOUS RADIOTHERAPY.

Under the charge of

A. P. BIDDLE.

Parasitic Sycosis Communicated from Cattle.—Dr. Breakey, after reviewing the history of a few cases of Sycosis Parasitica which had recently been under his care, the diagnosis of which was readily confirmed by the demonstration of the mycelia and spores of the tinea tricophyton in roots and shafts of hair and beard, and in crusts and scrapings of cuticle and by the association of the patients with the care of cattle, the milking and handling of cows, calls attention to the amount of this infection among cattle, especially in the west and during the winter months; and, while referring to our knowledge of the conveyance of diphtheria by the cat and the dog, plague by the rat, typhoid fever by the fly, etc., shows that the dangers of disease communicated from the lower animals is not wholly as to systemic conditions, but that parasitic diseases of the skin are also communicated probably much more frequently than has heretofore been thought, and quite often enough to furnish grounds for the growing belief that most, if not all the parasitic diseases of the skin, have had their origin in the lower animals.—(Wm. F. Breakey, *Journal of Cutaneous Diseases,* Dec. 1904.)

Diseases of the Skin connected with Errors of Metabolism.—That normal and abnormal metabolic processes play an important part in health and disease cannot be denied, but we are yet far from an accurate knowledge of the exact manner in which their effect is produced, or indeed of the definite changes in the tissues produced thereby. While experimental physiology and laboratory studies have done much to demonstrate some of the facts of assimilation and disassimilation, it is to clinical observations that we must mainly turn for our knowledge of the effects of metabolism on the skin or other organs.

It must be acknowledged that thus far there have been relatively few recorded observations showing these effects with anything like the positiveness which is often demanded in modern medicine. It can further be stated that many of the facts which must be accepted clinically, as to relationship under consideration, can probably never be demonstrated experimentally or by laboratory methods, with the precision we are accustomed to look for in regard to some of the medical and surgical matters in the realm of bacteriology.

But, on the other hand, there is much in medicine which is incapable of exact demonstration, and we rightly accept many facts and conclusions, on the basis of accurate clinical observation by those qualified to judge. In this way much of the evidence in regard to the relation of errors of metabolism to certain diseases of the skin has been accumulated, and with advancing science they are being more and more put to the tests of laboratory work.

We may sum up our knowledge in regard to diseases of the skin dependent upon errors of metabolism, as follows:

1. Metabolism represents the changes occuring in the system, whereby nutritive materials and oxygen are transformed into living tissue, and re-transformed into waste products, while, during these processes, their potential energy is being given off in living force and heat.

2. As healthy cell action and transformation are produced and maintained by perfect metabolism, so when there is perverted metabolism the structures in various parts of the body must suffer, and this we call disease.

3. As every cell in the body constantly takes up and gives off material, so the results of metabolism can be affected by the normal or abnormal action of every living cell in the organism.

4. Metabolism is, however, principally affected by (a) the kind of nutriment taken; (b) the action of the digestive organs and ductless glands, and (3) the action of the nervous system.

5. Certain skin lesions, or eruptions, have been credibly reported as connected with or dependent upon the generally recognized metabolic conditions of (a) gout; (b) rheumatoid arthritis; (c) diabetes; (d) obesity; (e) scrofulosis.

6. As yet no absolute statements can be made as to the necessary connection of the two, for the same eruptions occur in several of the metabolic affections.

7. The idiosyncrasy of the patient, and many causative elements, external or internal, nervous, etc., often determine which form of skin disturbance or alteration shall take place.

8. Errors of diet, disorders of digestion, faulty excretion and nervous derangement, which have all along been recognized as causative elements in many diseases of the skin, often find their ultimate expression or mode of action through the faulty metabolism induced thereby.

9. Metabolic errors are exhibited in the excreta from the lungs, skin, intestines and kidneys; and of these, the urine best affords a satisfactory indication, as it represents nearly one-half of the total excreta, and practically all of the nitrogenous and soluble mineral substances, together with about one-half of the water expelled from the system.

10. Complete and minute urinary analysis is a very great aid in discovering metabolic errors, and in establishing proper therapeutic measures for the cure of many diseases of the skin.—(L. Duncan Bulkley, M. D., New York, *Medical Record,* Nov. 26, 1904).